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**THE IMPACT OF SMART TECHNOLOGICAL TOOLS ON EXPERIENCE
VALUE CO-CREATION IN TAMPERE TOURIST DESTINATION**

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ABSTRACT

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The Internet has become the main information source when tourists search for travel information. With the evolution of ICT from fixed Internet to mobile Internet, an increasing amount of tourist destinations are adopting technological innovations to build up their own official online platforms and tools. This study was carried out to identify the impact of smart technological tools (STT) on experience value co-creation in smart tourist destinations (STD) with specific reference to the Tampere. The study was conducted as a qualitative study and the data was collected using semi-structured interviews. Further, a thematic analysis was implemented to analyze the collected data.

Based on the findings of the study, it was uncovered that digitalization is affecting how businesses operate and hence in order to be effective and competitive, tour operators and many other travel organizations rely on a variety of digital procedures and generally seek out vendors that have significant concentrations of digitalization. It was also identified that Internet shopping has become increasingly popular among customers and this comprises travel-related goods including airline tickets, lodging, travel packages, multi-day vacation destinations, quick getaways, auto hires, and other such items.

Based on the study, the recommendation is to maintain a straightforward, educational, and transparent website whilst exploring the e-commerce options available on the market before integrating an e-commerce infrastructure into the website, ensuring that the company website functions perfectly on mobile platforms, such as smartphones and tablet computers. It was also identified that in the interest of business development, CRM (Customer Relationship Management) systems support could be utilized in managing the data the organization collects regarding current and future clients. Hence to compete and succeed, it was recommended to have in place a CRM framework.

Keywords: Smart Technological Tools, Value Co-Creation, Smart Tourist Destination

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1. Introduction

1.1 Background

The Internet has become the main information source when tourists search for travel information. With the evolution of ICT from fixed Internet to mobile Internet, an increasing amount of tourist destinations are adopting technological innovations to build up their own official online platforms and tools. These include official websites, official social media pages (e.g., Facebook, Twitter, YouTube), and mobile applications (apps), smart cards, etc. These platforms allow destinations to provide a variety of services such as offering travel information, building the destination's image and brand, booking hotels, restaurants, transportation, communicating with tourists from before to after travel, and other services (Zhang et al., 2018). These technological advancements can support technology-enabled value co-creation in smart tourist destinations. Digitalized platforms (e.g., websites, social media, etc) have become the basis of brand offering and brand relations and those platforms provide the space for actor engagement. With the interactions using digitalized platforms, consumers can obtain personalized products and services, service providers can offer better and personalized products and services, consumers can give subjective opinions about the platforms and destinations, and co- create value (Zang et al., 2018).

The emergence of smart technology has impacted greatly on the emergence of the smart tourism paradigm. Destinations try to change their roles and business logics along with these innovations in technology. This process has enabled destinations to use technological tools to define their products and services while enabling tourists to actively co-create their own experiences. Obviously in this process, technology is playing a large part in smart destinations as it enhances the competitiveness and development of destinations. Some destinations try to actively engage with tourists using technology but they don't know they are utilizing the concept of “co-creation” (Zang et al., 2018). As time passes, more and more technological tools will be created and destinations will adopt them to provide the best services to the tourists. According to Femenia-Serra et al.,(2018), these various smart technologies serve as potential tourist experience enhancers, particularly at the Smart Tourist Destinations (STD), and it is expected that tourists will accept and use them as such. However, it is unclear whether tourists truly believe that these technologies can provide them with a better, smarter experience. Their perception and attitude

toward Smart Technological Tools (STT) may affect differently with their co-creation intention. Hence, the importance of studying this topic is, this study will outline whether the tourists choose to co-create using STT provided by the destination, the ways, and significance of using online tools to co-create in a destination for improved customer experience to be a competitive smart destination among many other destinations, despite the benefits why some people don't use STT to co-create.

1.2 Study purpose

In this thesis, I have studied "The impact of smart technological tools on experience value co-creation in smart tourist destinations" as a case study of Tampere smart tourist destination. More broadly, I evaluated, with the evolution of smart technology and the invention of technological tools, whether it has given more chances, and a platform for tourists to co-create with destination service providers and create a more personalized tourist experience.

"Smart Technological Tools" is an umbrella term for many advanced technologies including sensors, near-field communication (i.e. short-range wireless technology that helps to transfer information between devices quickly and easily with a single touch e.g. paying bills, downloading coupons), augmented and virtual reality, ubiquitous connectivity through Wi-Fi and other networks (i.e. Ubiquitous networking is the underlying combination of wired and wireless technologies that support communication among the various systems involved), the use of mobile technologies, mobile apps, smart cards, latest generation websites and social networks, chatbots (i.e. a computer programme designed to stimulate human conversation), and other advanced technologies (Gretzel et al., 2015; Huang et al., 2017 as cited in Femenia-Serra et al., 2018).

"Co-creation" is a management initiative, or a type of economic or business strategy, that focuses specifically on customer experience and interactive relationships by bringing together different parties, such as a company and a group of customers (tourists in this case), to jointly produce a mutually valued outcome and, in the end, create a value-rich experience (Berrada, 2017). In tourism, "experience value co-creation" permits and encourages tourists to participate more actively in order to produce a more valuable tourist experience from the beginning to the end of

the travel (pre-travel, on-travel, post-travel phases). “Smart tourist destinations” (STDs) are those that employ cutting-edge technical infrastructure to enhance tourist experiences and boost their own competitiveness. This notion is increasingly giving rise to a new destination management approach that is shaped by technology as well as other variables such as new governance and management views and a rapidly growing network of digital enterprises.

By exploring this topic, I aim to find out answers to following questions;

- Do smart technological tools facilitate tourist experience value co-creation in Tampere STD? (e.g. Visit Tampere website, Tampere.fi mobile app, etc.)
- To what extent tourists are engaged in experience value co-creation using STTs?
- How digital means help tourist to make a memorable and emotional experience?

1.2.1 Problem Statement

The adjective "smart" is increasingly given to a diverse variety of advancing technology that enable immediate, efficient, and instinctive communication between human as well as non-human entities (Poslad, 2011). Smart buildings, smart tourism, smart cities, smart destinations, and smart hotels are all phrases that have been employed to underline technology-based methods that strengthen the guest experiences even while improving the productivity of tourism enterprises and/or sites. Nevertheless, there is no unanimity about what smart entails as well as how organizations may enhance their smartness.

While there is no widely accepted definition of just what smart tourism is (and is therefore not), the notion of smartness in tourism is very often examined from two viewpoints. First and primarily, smart is connected to the advancement of information and communications technologies (ICT) as well as intelligent systems. Smart technologies are considered as effective tools for administering destinations, excursions, conferences, or hospitality companies in this aspect. The acquisition, evaluation, and dissemination of information, in addition to the application of big data, connected technologies, and artificial intelligence capabilities, are at the foundation of smart management strategies. Connection to widespread high-speed internet is also

important. The second element is connected to durability and sustainability and how "smart" individuals handle supplies (Zang et al., 2018).

In this regard, the problem statement of the study can be stated as follows;

There is a lack of comprehensiveness on how to use smart technologies by tourists to be used to drive the smart tourism.

1.3 Thesis structure

In brief, the study will first conceptualize the research problem in the means of analyzing the literature. Next, will discuss the intended methodology where the study approach will be elaborated. In the succeeding chapter, will present the findings of the study in terms of more of a summarized version. The next chapter will discuss the findings along with the related extracts from the interviews to present a more elaborate presentation. It will also bring the conclusion and appropriate recommendations.

2. Conceptualization

2.1 What is 'smart' and its applicability to tourism?

Smartness, so according to Buhalis (2020), is the systemic and transformative upheaval of enterprise networks which accelerates behaviors permitted through the application of technological advances. Smartness is about maximizing connections and environments rather than simply promoting personal processes or enterprises. It demands stakeholder interconnectedness and compatibility to promote collective adaptability, which then in turn involves work process reengineering and inventive ways to value co-creation, reshaping industrial sectors (Buhalis et al., 2022).

It produces new dynamics amongst industry actors at all points along the value chain (Jiang and Stylos, 2021). In addition to the fact that technological innovation significant, but so is the expansion of innovative thinking and creative methods of reasoning. Open technical frameworks lead to the development of digital platforms that allow strong real-time data exploitation (Stylos et al., 2021; Buhalis and Sinarta, 2019). These promote ecosystem efficiencies by strengthening interconnectedness, procedures, contacts, and information, enhancing organizational operational efficiencies, and assuring that all stakeholder requirements are fulfilled (Stylos et al., 2021).

Smart destinations create adaptable approaches to address exposures through interactive risk and emergency and catastrophe assessments, culminating in real-time responsiveness and location robustness for the biosphere (Bethune et al., 2022). Tourism, which is currently heavily dependent on technologies for information and communication (ICTs) (O'Connor, 1999) has always been early to grasp the possibilities of smart. Destinations for smart tourism or the smart destinations, utilize technology incorporated ecosystems, adaptive operations at the micro and the macro levels, peripherals with several touch-points, and stakeholders that employ the network interactively as a neural system (Buhalis and Amaranggana, 2013).

Smartness, on the other hand, has attracted less attention in the hospitality business. Regardless of the early and ubiquitous deployment of technology-based platforms (Buhalis et al., 2022), meaningful implementations of smartness in tourism appears to have lost, particularly in smaller and standalone establishments. Several hospitality organizations mainly maintain a Web 1.0 presence via brand.com domains. Web 2.0 activity can sometimes be confined to one-way advertising rather than comprehensive participation with stakeholders. Despite their enormous potential, numerous hospitality organizations lack adequate ICTs, maintaining outdated and sometimes inefficient management techniques and inherited thought notwithstanding the requirement to drastically enhance organizational performance and develop in a market that is becoming more interconnected (Buhalis et al., 2022).

While there is significant amount of literature on smart tourism, there are far less investigations on smartness in tourism (Mehraliyev et al., 2019). The majority of publications are biographical in form, therefore, although valuable for following field advancement, does not promote a deeper comprehension and understanding of fundamental concepts. Numerous writers have recommended for in-depth qualitative approach, as well as moving much beyond traditional

academic assessments to highlight the substantial benefits that smartness can provide to clients enterprises, industry, as well as community groups (Buhalis and Leung, 2018; Huang et al., 2021; Jeong et al., 2019). This study used many systematic literature reviews of smart hospitality to summarize advancements, concepts, and concerns in order to fill this research vacuum. This conceptual development underpins the future research priorities for smart hotel deployment.

2.2 Journey from Smart Cities to smart tourism: the key variables

As information and communication technologies become progressively commonplace, the adjective "smart" is progressively being utilized to describe advancements that are propelled by a mixture of computerized information gathering, accessible and big data, as well as artificial intelligence (Buhalis, 2022). With every driver developing at a speedy pace, the description of smart still seems to be ambiguous and even sometimes overused. According to Buhalis (2020), smartness exploits the interconnection and compatibility of technologies to reinvent procedures to generate new products and services whilst maximizing value for all parties involved. According to Harrison et al. (2010), smart cities are constructed on instrumentation, interconnectivity, and algorithms that use near-real-time factual data from both physical and digital instruments. These would be interconnected via corporate computer systems, which link numerous stakeholders whilst optimizing operational choices through sophisticated analytics, simulation, and optimizing procedures.

They also connect several stakeholders while at the same time, which enhances the overall effectiveness of the ecosystem. Systems are proactively re-engineered in real-time, generating value for all relevant parties. Continuing improvements in equipment, software, as well as communications act as accelerators and catalysts for smartness to become more widely used. To maximize value for ecosystem members, the paradigm of smartness demands a multitude of interconnected equipment propelled by creative, intelligent, flexible, and adaptable operations (Buhalis, 2019). Agility thinking as well as agile transformation techniques must be implemented throughout the ecosystem to be productive; agility is necessary not simply for the governance of one organization's innovations, logistics, back-office processes, head offices, and top executives, but also for the overall infrastructure (Rigby et al., 2020).

Various advanced technologies, such as the production of low-cost, nearly replaceable radio-frequency identification labels, detectors and transmitters, the deployment of internet of things (IoT)-type equipment, and extensive penetration of smartphones, have stimulated innovation in the tourism sector. These developments make real-time, geo-located large data collecting conceivable. When partnered with low-cost, high-speed connectivity, high-capacity, low-cost cloud services, and sophisticated artificial intelligence (AI) and machine learning (ML)-based technologies, personalized and reframed user experiences are achievable (Buhalis, 2020; Buhalis et al., 2019). Blockchain has the ability to greatly expand this even more by empowering not only billing but then also customer personalization tracking, client supervising, groundbreaking rewards programs, smart vendor agreements, interconnected property maintenance structures, and authenticated evaluations and ratings on customer created content portals (Kizildag et al., 2019). These improvements, when integrated, permit big data analysis to more precisely comprehend customer preferences (Ahani et al., 2019; Stylos et al., 2021b; Hunter et al., 2015), fulfill customer expectations, and strengthen brand loyalty (Purohit and Thakar, 2019).

Smart adoption cannot be promoted only by technology. Agility empowers businesses to efficiently adapt to situational variables and technological innovations by employing provide a wealth goods and services. Agility affords tremendous possibilities for the ecosystem to co-create new approaches to business (Koo et al., 2015). According to Li et al. (2017), an agile mentality could assist a company create and maintain a strategic advantage, even though micro businesses and start-ups gain footing, benefitting from their abilities to quickly produce products as customer requests materialize. Making a profit from agility demands a huge transformation in management thinking in addition to current organizational paradigms. Both must shift away from isolated competitiveness and more towards collaboration and the development of common value.

Smart technologies allow respondents to reinvent value chains as well as established producer-client-competitor interrelations by participating in innovation activities and communicating resources and capabilities, optimizing the ecosystem's collective potential by permitting tenuously linked both economic and social characters to socialize around each other, trying to respond to emerging value co-creation possibilities instantaneously and completely by chance (Buhalis, 2020). TripAdvisor.com is a nice illustration of this type of methodology in tourism. The platforms offer objective and impartial initiatives of customer satisfaction which can be

harnessed by clients, middlemen, destination marketing organizations (DMOs), government agencies, and perhaps even new entrants by widespread communicating its patented technology user reviews with vendors, online databases, and many others via open application graphical interfaces, raising functionality for all engaged and inevitably driving steadily increasing room reservations (Mehraliyev et al., 2019).

2.3 Smart tourism and smart tourist destinations

The term "smart" has grown in popularity to denote technological, economic, and societal advancements fuelled by smart technology. Wearable technology and augmented/virtual reality are projected to push the boundaries of what data can be collected even farther. Smart city efforts are springing up all over the world, with an emphasis on developing smart infrastructure (Gretzel et al., 2016). Smart technology are transforming customer experiences and producing innovative tourist business models in the tourism industry. Cloud computing, big data, mobile applications, location-based services, geo-tag services, beacon technology, virtual reality, augmented reality, and social networking services are just a few examples of cutting-edge smart tourism technologies (ibid).

In this regard, smart tourism refers to a specific technological approach that enhances tourist experiences and provides additional value to clients. Smart tourism technologies are unique tools, goods, and services that will generally provide value to the customers by encouraging increased connectivity, interaction, personalization, and co-creation (Aziz *et al.*, 2020). Gretzel, Sigala, Xiang & Koo (2015) as cited in Vargas-Sánchez, (2016) has provided a definition for smart tourism: “smart tourism is defined as tourism supported by integrated efforts at a destination to collect and aggregate/harness data derived from physical infrastructure, social connections, government/organizational sources and human bodies/minds in combination with the use of advanced technologies to transform that data into on-site experiences and business value-propositions with a clear focus on efficiency, sustainability and experience enrichment.”

The United Nations World Tourism Organization has emphasized smart tourism as a method of marketing and providing responsible, safe, sustainable, and high-quality solutions. Gretzel et al. (2015) characterized smart tourism as: individual bodies or institutions coupled with the utilization of advanced technology to convert that knowledge into on-site interactions and economic benefits with a definite concentrate on efficiency, conservation, and experiential augmentation. Besides from smart tourism, the phrase "smart" has been employed to denote a variety of disciplines, including smart city, smart tourism destination, including smart tourism ecosystems. Whereas these phrases are evidently interrelated, each one has its own connotation and concentration. Smart tourism destinations can indeed be viewed as an expansion or special case of smart cities, as these cater to both visitors and residents (Gretzel et al., 2015). Rather than emphasizing them individually, the smart tourism ecosphere proposes and underlines the relationships between technology and "smart people." Smart tourist destinations are popular due to various networks among as well as between individuals and devices. The essential technology in this interconnectedness is the internet of things. Visitors have a crucial component in this ecology as well. Tourists arrange their excursions using a variety of smart technologies. It's challenging to see smart tourism operating without travelers consuming adopting technologies including social networking sites (Hunter et al., 2015), user-generated information (Chung et al., 2015a), recommendation engines (Lee et al., 2017), cellphones, or other communication technology.

Generally speaking, smart tourism strives to improve management/governance by developing information and communication infrastructure and capabilities. The heavy use of such technology infrastructure ought to strengthen their consumer's viewpoint and improve tourists' travel experiences. Without them, its technological dimension would lack focus and would be unable to deliver long-term competitive advantages (Vargas-Sánchez, 2016).

One closely related term to smart tourism is the smart destinations or smart travel destinations. The smart tourist destination (STD), that has just been conceived, is a matter of comparable interest to scholars and governments. Tourism must restructure itself to reflect modern concerns including global tourism development, urbanization, and increasing technological utilization. The STD appears to be a revolutionary paradigm for tourist destination administration that really is a component of a smart ecosystem (Gretzel, Werthner, Koo, & Lamsfus, 2015). Numerous

industries aspire to be smart these days, notably STDs, smart cities, smart technology, and intelligent visitors. If smart concepts possess a common underpinning, including such technical improvements motivated by services (Vesci, Polese, Botti, Grimaldi, & Monda, 2018), a connection exists between both the innovative metropolis or smart city conception and the work of STD. Undoubtedly, the groundbreaking city is inferred from the smart city concept, which refers to an urban domain that employs information and communication (ICT) to promote better transportation system, make manoeuvrability and public transit connections more seamless, improve energy efficiency, and enhance the overall quality of life of its occupants. According to Zeghni, Fabry, and Blanchet (2018), the smart city is a complicated and adaptable urban ecosystem comprising many stakeholders that is powered by ICT, entrepreneurship, and environmental problems whilst profiting from personalized governance. In contrast, the STD is a touristic management approach that builds on smart city technology (Ivars Baidal, Celdran-Bernabeu, Mazon, & Perles-Ivars, 2017) and is getting popular in urban development and tourism industry.

According to Gretzel et al., (2016) smart destinations are subsets of smart cities in which smart city ideas and infrastructure are applied to urban or rural locations. They collect and analyze large data from inhabitants and tourists to help with mobility, resource availability and allocation, sustainability, and quality of life/visits. Smart tourism enables travelers to better engage and interact with locals, as well as local companies, government, and local attractions, and to develop tighter relationships in cities (ibid).

In a similar point of view Vargas-Sánchez (2016) describe a STD (Smart Tourist Destination) as an integrated network of management systems, platforms, and all sorts of data (on mobility, energy consumption, and so on) that enable a more effective and efficient accessibility to the products / services that comprise the offer, adding value via personalization, and increasing tourist contact (before, during, and after the visit) with the destination and his/her integration in it. A STD is based on the principles of innovation and sustainability, aiming to increase local populations' quality of life while also enhancing the experience of tourists (ibid). Different countries try different Smart Tourist Destination (STD) strategies in their tourism cities. China and South Korea are investing in establishing the technological infrastructure needed for smart tourism. Many smart tourism initiatives in Europe originated from smart city programs, with an

emphasis on innovation, competitiveness, and the creation of end-user apps. The emphasis in Australia is on smart governance, particularly open data (Vargas-Sánchez, 2016).

Meanwhile, despite massive expenditures in urban service upgrading, tourism continues to be neglected in the implementation of intelligent city planning; do not either they integrate the service provided by smart cities in ecotourism development (Gretzel and Koo, 2021). Thus, notwithstanding their similarities, the smart city and the STD pretend to avoid one another. Tourist destinations in urban settings face significant geographical, institutional, psychological, and engineering hurdles (Aidi & Fabry, 2022).

Conversely, the city of the twenty-first century is no longer confined to prolonged habitation and political and financial engagement. Nevertheless, it is dynamic, polymorphous, and undeniably a tourist destination. Moreover, current period is undergoing a growth in the application of ICT, the timeliness of information accessibility the fragmentation of interactions, and the emergence of novel mobility-related streams, heralding a brand-new era of tourism (Aidi & Fabry, 2022).

Assume that, in aggregate, travel is a critical requirement for expanding a region and attaining individual liberty. In such a scenario, it is likely to be followed by possible aggravations including such tourist-resident confrontations, over-tourism (Goodwin, 2021), or social and financial repercussions (Wilson, 2008). To conserve history and enhance visitor numbers and urban regeneration, the tourism ecosystem must be made more ecological and smart.

Ivars-Baidal et al., (2019) have used the Delphi technique to ascertain expert opinion on the viability of the Smart Tourist Destination (STD) strategy, its benefits and limits, and the magnitude of the influence of ICTs on tourist destination management and marketing. According to the findings, on one hand, the primary benefits of the STD strategy are increased destination competitiveness, improved demand satisfaction, and the development of new goods. It also helps to increase visitor spending and public-private partnerships. On the other hand, less important benefits include increased demand and the appearance of new sources of money in the destinations. As a result, it is expected that the STD strategy enhances tourism management efficiency and destination competitiveness but does not necessarily result in an increase in the number of the tourists (ibid).

According to Ivars-Baidal et al., (2019), destination management is developing toward a more technological and data-driven environment, which will peak in the medium term. The expansion of ICTs is helping to shape a new environment for tourist destination management, which necessitates several management techniques, the most famous of which is the STD approach (Kim et al., 2017).

This is a fairly ambitious strategy that suffers from some philosophical imprecision but is readily carried out from an institutional standpoint or from the perspective of the interests of technical corporations (Kim et al., 2017). The authors concluded that the STD strategy is ideal for adapting locations to the digitalization of tourist activities at all stages of the travel cycle. However, the greatest obstacles to the STD approach's progress are identified at the strategic-relational level which connects more with governance than technology (ibid). Therefore, the authors highlighted 3 factors to consider when redesigning a destination:

1. The STD model should be tailored to the demands and resources of each destination prioritizing the demand and potential of the destination
2. Overcome the structural limitations of the destination to collaborate innovations and ICT in the destination
3. The chance to create a systematic management method that permits input from all levels of destination's public and private actors because, an effective growth of an STD is unlikely without a better level of collaboration on a local scale.

(Fyall & Garrod, 2019)

STD is a developing study subject in the tourism field, especially linked to ICTs as drivers to realize STD's claims of invention, profitability, and desirability based on environmental responsibility and the quality of the relationships between travelers and communities (Lopez de Avila, 2015). The principle of intelligence involves use of technology to combine and integrate all participants, facilitating value generation via ICT infrastructure established in the region (Xiang, Tussyadiah, & Buhalis, 2015).

2.4 Smart technological tools

In smart tourism, ICT can be identified as the “central nervous system” (Lòpez de Àvila et al., 2015 as cited in Mandic & Pranicevic, 2018) of smart destinations as everything in a smart destination is built around it. As a major part of it, the continuation of new advancements in digital mobile technology has been able to adopt more advanced technological solutions for the traditional technology, e.g. GPS with apps. Partly, these technological advances have enabled destination service providers and planners to acquire free, real-time information and behavioral patterns of tourists (Lòpez de Àvila et al., 2015). For instance, tourists use mobile technology to search for information and opinions about destination services and tourist attractions or for social purposes like sharing their own experiences with others (Femenia-Serra et al.,2018).

Tribe and Mkono (2017) have examined technology-enhanced tourism experiences and developed a tourist experience hierarchy that is defined by the level of intensity of technology usage. According to the authors, there are four types of tourist experiences facilitated by technology that can provide by the destination service providers: 1.Traditional experience with limited technology usage 2.Technology- assisted experience with non-interactive web 1.0 technology 3.Technology-enhanced experience with interactive web 2.0 technology 4.Technology empowered experience with reciprocal, captivating, compelling technology.

Notably, the use of more advanced technology significantly involves enriching tourists' experiences in smart destinations. However, Aziz et al., (2020) argue that the critical point of smart tourism technology is attainability and comprehensiveness that gives interactivity and personalization to tourists' when using technologies such as city guide apps, mobile payments, Google maps, and tourist attractions' map locations. (Aziz *et al.*, 2020).

ICT and smart technologies that adopted artificial intelligence has been caused alterations in consumer behavior in the hospitality and travel sectors (e.g. tourists). New business realities are beginning to emerge as a result of altered consumer behavior. With comparison to conventional tourism, Technology adoption is essential if you want to utilize ICT to take part in lively debate. More importantly, future development depends on the utilization of mobile platforms like tablets, smart phones, and other portable devices.

On that note, Law, Buhalis, and Cobanoglu (2014), have examined why **end users** use ICT in tourism and found five key points 1. Information search (e.g. through social media) - to look up reliable and relevant information about travel 2. Evaluation of alternatives- e.g. make use of user comments on social media to consider different options 3. Purchase decision- authors explain that online purchase decisions are quite narrow depending on one's rationality 4. Post-purchase behaviour- to share information and experiences with other travelers (e.g. sharing travel photos on social media channels) 5. Technology adoption-this fact weighs more toward the tendency to adopt technology and as evident in the article, it depends on various reasons such as age, gender, etc.

Mobile phones have aired a larger portion of smart technology domain because of many reasons such as its easiness to use and its uses. According to Dorcic, Komsic, and Markovic (2019) one claim that constant smart phone usage during a day has become a common factor in people's daily lives and somehow it has its effects on using smart phones while travelling (Wang and Fesenmaier, 2013). But another claim that constant use of smart phones in daily lives do not affect straight to their travelling (Meng et al.,2015 as cited in Dorcic, Komsic, and Markovic, 2019). However, Wang et al., (2016) as cited in Dorcic, Komsic, and Markovic,(2019) were able to find five characteristics that steer travelers to use smart phones: external and internal motives, situational facilitators, smartphone usage on previous journeys, cognitive assumptions and regular smartphone usage.

Similarly, Law, Chan, and Wang (2018) p 635, have summarized the following five variables influence customer adoption of mobile travel technologies: 1. utilitarian considerations: assessment of quality of mobile technology by the consumer also known as "extrinsic motivators", 2. hedonic factors: also known as "intrinsic motivators" such as the effect of daily mobile usage on travel mobile usage , 3. dispositional variables: concerns one's self attributes such as capability to use smart phones, privacy concerns etc., 4. behavioral factors: consumer behaviours such as getting the assistance of a mobile in everything of one's everyday life can influence on the extent of using mobile when travelling , and 5. environmental factors: "service environment" can effect on the choice of using smart phones for instance, to use online booking systems, online payments etc.

According to Wang et al., (2016) tourists can use smart phones for communication, social activity, information gathering, information search, and amusement when traveling. It is critical to research client preferences while developing hotel mobile applications. Human-like characteristics should be included into the design of tourism and travel-related mobile technology and applications. Travelers want to use hotel mobile applications to receive more relevant, timely, and location-based information, make hotel reservations, check in, and manage reward programs (Doricic, Komsic, and Markovic,2019).

2.4.1 Smart tourism technology

Throughout the academia, several academics have characterized smart tourism technology, and a majority of them have recognized that STTs are multifunctional constructions that can be broken down into four dimensions: accessible, information quality, engagement, and customization (Huang et al., 2017; Kim and Shin, 2015). As per Jeong and Shin (2019), accessible refers to how someone can acquire and employ the available information at the destination by employing various kinds of SSTs. Accessibility or ease of access presume that travelers and technologies can converse with one another (cited Kim and Garrison, 2009).

Furthermore, Domnguez Vila et al. (2019) suggest that internet connection is significant in marketing locations and drawing potential visitors. As a result, accessibility would become a major component in tourism destinations, and it has a substantial influence on tourists' plans and actions (Shafiee and Es-Haghi, 2017). According to Lee et al. (2018), information quality is characterized by the amount, timeliness, authenticity, and reliability of intelligence gathered by travelers from contemporary information system. Travelers will acquire the full spectrum of delights and knowledge for their tourist areas by employing STTs including such AR or VR (Kim and Shin, 2015).

Similarly, Pavlou et al. (2007) described information quality as the magnitude to which a site offers tourists with the necessary information; viewed as “ useful and advantageous if the data is considered to be factual, pertinent, and trustworthy, it will increase a traveler's impression of the information content of a seller's webpage (Pavlou et al., 2007). No and Kim (2015) defined

tourism as intangible because of its multidimensional character. Individual or traveling blogs, community websites, corporate websites, and social media platforms are instances of informational websites. Furthermore, Jeong and Shin (2019) point out the significance of information quality and trustworthiness in impacting travelers' overall experiences and enriching their tour packages at smart tourism destinations (cited in Jeong and Shin, 2019).

2.5 Customer experience

In the tourist industry, the concept of co-creation of experience is appealing because it benefits all stakeholders and contributes to the destination's distinctiveness and authenticity. Furthermore, the current tourist climate forces tourism companies to incorporate this new approach into their innovation policies in order to comprehend the intangible aspect of tourism, the process of creating unique experiences, the realization of dreams, and the fulfillment of tourist fantasies (Berrada, 2017).

Memorable visitor experiences from the standpoint of psychological, anthropological, sociological, travel and hospitality, and advertising; accordingly, memorable travel experiences have become intriguing cross-disciplinary studying fields (Seyfi et al., 2019; Shing et al., 2018). Memorable tourism encounters and tourist experiences are two categories that are comparable yet have various connotations, ramifications, and implications (ibid). Individual travelers construct memorable travel experiences based on how they perceive their travel experience (Kim and so, 2012; Tung and Au, 2011). Conversely, a tourist experience is characterized as a tourist's sensory and emotional psychological condition throughout a service experience, and that this description somehow doesn't effectively represent a memorable tourism experience (Kim et al., 2012; Shing et al., 2018).

As a consequence, most researchers indicated that not every tourism experience immediately translates into a memorable tourism experience that's because a tourist experience is affected by different factors that are beyond the command of the traveler. Tourists psychologically perceive tourism activities as well as locations that are out of management's command (Farber and Hall, 2007; Knobloch et al., 2017). Additionally, travelers reproduce exceptional tourism experiences

when they returned defining an unique travel experience relying on their ability to recollect and remember following a trip experience (Kim et al., 2012; Seyfi et al., 2019) (Sthapit and Jimenez-Barreto, 2018; Shing et al., 2018). Using this notion, the much more daunting problem for the tourist sector is converting staged experience products into personal experiences.

As a direct consequence, just about all intellectuals highlight the significance of memorable tourism experiences for travelers' subsequent decision-making processes (Kim and Chen, 2019; Seyfi et al., 2019), so even though travelers would depend heavily on preceding memories and events to construct upcoming trip and ascertain whether one should reconsider a specific destination (Miao et al., 2014; Shing et al., 2018). Tung and Au (2011) as well as Kim et al. (2012), for particular, were visionaries in establishing metrics for memorable tourism experiences.

Tung and Au (2011) established four attributes that describe characteristics of memorable travel experiences (emotion, anticipation, consequentiality, and recollection). Similarly, Kim et al. (2012) characterized memorable tourist experiences into seven categories (hedonism, refreshing, native culture, meaning and purpose, education, participation, and originality) with 24 indications which are thought to influence a person's remembrance of tourism experiences. As a response, numerous studies have utilized and elaborated on these variables across sectors and geographies. Numerous academics, for particular, Kim and Ritchie (2014) and Tsai (2016) verified and corroborated the memorable tourism experience components created by Kim et al. (2012). Although Kim et al. (2012) articulated the fundamental notions of memorable tourist experiences, this thought would influence the recognizability of experiences, because each participant constructed an experience based on their own distinct evaluation and interpretation (Sthapit and Coudounaris, 2018). At about this stage, the diversified histories of travelers lead to a diverse range of conceptions of tourist products (Tsai, 2016).

As a corollary, MTE scales must be confirmed further in consideration of the report's context (Kim and Ritchie, 2014; Shing et al., 2018). Whereas most visitors engage in comparable events within the same site, the memorability of their encounters fluctuates, and they might generate divergent judgments of their experiences (Kim, 2018). Further particularly, the relative significance of these categories would change based on the locales, destinations, and socio-

demographic characteristics of travelers; consequently, there is no unanimity on what comprises MTEs (Shing et al., 2018).

In this regard, Jennings and Nickerson (2006) have developed an experience typology matrix using intensification of co-creation and intensification of technology and according to their interpretation, there is a positive relationship between the intensity of technology usage and intensity of experience value co-creation. In addition, Barile et al., (2017) explained that institutions have a significant role in putting good use of merely existing technology to help actors to combine resources and exchange services. Similarly, Jennings and Nickerson (2006), suggested that businesses must take advantage of emerging smart technologies and incorporate them into their overall service strategy and operational structures. Then, technology will not replace personal human interactions. Rather, they will function as tools for improved service and experience creation. As a result, smart technologies must be viewed as vital instruments that can be used both in the background and in the foreground to drive engagement and expand the possibilities for creating individualized experiences.

2.6 Value co-creation

Among the major research goals in advertising and learning have been value co-creation behaviors. Value co-creation is a management strategy that focuses on the establishment and retention of common beliefs between corporations and their consumers (Arnold, 2017; Chatterjee and Nguyen, 2021). In actuality, value co-creation necessitates communication between parties and collaborators to generate mutual value (Wong et al., 2016). Value co-creation at institutions is merging the finances, knowledge, capabilities, and competencies of multiple agencies in a bid to enhance long-term growth.

Co-creation comprises the simultaneous production of value between the consumer and the provider (Prahalad and Ramaswamy, 2004a) and involves the development of encounters and the resolution of conflicts through a coordinated work between the parties of a corporate partnership. This notion is based on the assumption that the foremost important business competencies are not currently present in the value chain, but rather occur at the moment of contact between the

client and the organization. In just about any event, the first is a value co-creator (Yi and Gong, 2012). In just this perspective, Vargo et al (2008) argue that all entities participating in an exchange process have a shared feature: co-creating value through system integration and service provision.

As a corollary of this assumption, the corporation must commence by realizing that contributing positively to the proposition is unachievable without collecting or combining resources that transcend beyond the business alone (Prahalad and Ramaswamy, 2004). As a consequence, value co-creation is viewed as a means of generating value for both service providers and clients (Vargo et al., 2004). The customer's involvement in this process is dependent on accomplishing a set of tasks in order to accomplish a certain goal (Payne et al., 2008).

Yi and Gong (2013) differentiate two different forms of value co-creation behavior: engagement and citizenship. Customers' in-role behaviour is connected with the co-creation of items or services through the interaction of customers and the business in a complex system comprised of data searching, information dissemination, appropriate behavior, and personal engagement. Citizenship behavior also refers to a customer's extra-role actions that consist of special efforts to connect with the institution and contribute to its accomplishment in a multilayered structure that incorporates criticism, advocating, assisting, and volunteering (Yi and Gong, 2013). Individuals who participate in co-creation would devote their efforts, energy, and emotional resources to assisting an organization in manufacturing or providing services (Foroudi et al., 2017).

When tourists pick and choose a location to visit, they represent co-creators of the travel experiences (Buonincontri et al., 2017; Prebensen et al., 2013). Also, as visitors become ever more prominent figures in the destination environment, numerous destinations are becoming increasingly involved, especially in the creation and articulation of destination marketing communications and approaches (Oliveira and Panyik, 2015). Tourist involvement, particularly occurring frequently via social media interaction, indicates that travelers have a "substantial" role (Foroudi et al., 2022; Kim et al., 2018). Additionally, "online communities of brands can enhance all four components of brand equity, encompassing consumer perception, customer loyalty, brand recognition, and brand association" (Chan et al., 2022).

This illustrates that corporations (Tajvidi et al., 2021; Simon and Tossan, 2018) and tourist destinations could generate and provide added value to their businesses by utilizing mobile social knowledge transfer networks. Online interactions in the context of tourism encompass, including but are not confined to, communicating and transmitting content on tourist destination businesses through comments, evaluations, and viewpoints. Information provided by those networks aids in customer decisions (Zhang and Benyoucef, 2016), return intention (Shen, 2012), and organization effectiveness (Lin et al., 2019). Further, social marketing has been highlighted as a key determinant of customer satisfaction associations (Hajli et al., 2014), which would be vital in improving destination stickiness and revisiting inclinations (Woyo, 2018).

2.6.1 Moderating effects of cognitive theories on co-creation

Tourists hold a significant position in this smart management approach in tourism, and their relationship with the destination is based on their attitudes and behaviors and several expectations held (Barile et al., 2017, Femenia-Serra et al., 2018), namely, mobile technology use, data sharing for personalized experiences, and smart technologies for improved experiences (Femenia-Serra et al., 2018). If the visitor so desires, technology can become a part of the experience through active participation, social media engagement in pre-travel, on-travel, and after-travel phases, personalized information, and on-site use of mobile applications. The visitor determines the level to which tool is used to interact and co-create with the company. The more travelers engage with technologies and platforms, the more enriched their physical experience will be. As examined by Femenia-Serra et al., (2018), millennial travelers use mobile devices extensively and in a variety of ways at all stages of their trip. But yet, they indicate a limited desire to utilize these tools for dynamically engaging with other stakeholders. They have two different data sharing attitudes: they want to share some general data but no other, more personal data that smart destinations intend to utilize to increase their personalized experiences (Femenia-Serra et al., 2018)

Gonzalez-Reverte et al.,(2017) have measured the relationship between tourists' perceived risk of mobile device usage and several variables that demonstrate the perceived usefulness of mobile devices such as convenience, hedonic value, and future intention of use. According to the results, there is no single description or profile about digital tourists and it varies from one person to another. Therefore, the authors suggested that destination managers should include risk perception in their management agenda which will help them to better understand tourist behavior.

Furthermore, another study was conducted to look into the process of experience value co-creation in pre-travel encounters on destination official web platforms. It proposed a cognition–emotion–behavior model and evaluated the links between online platform experience, destination emotional experience, and destination engagement intention, as well as the mediating influence of destination emotional experience. According to the findings, using an online platform boasts a tourist's emotional rating of a destination, which ultimately increases their intention to engage with that destination. Moreover, destination emotional experience was discovered to fully or partially mediate the interactions between the online platform experience aspects and the destination engagement intention aspects (Zang et al 2018).

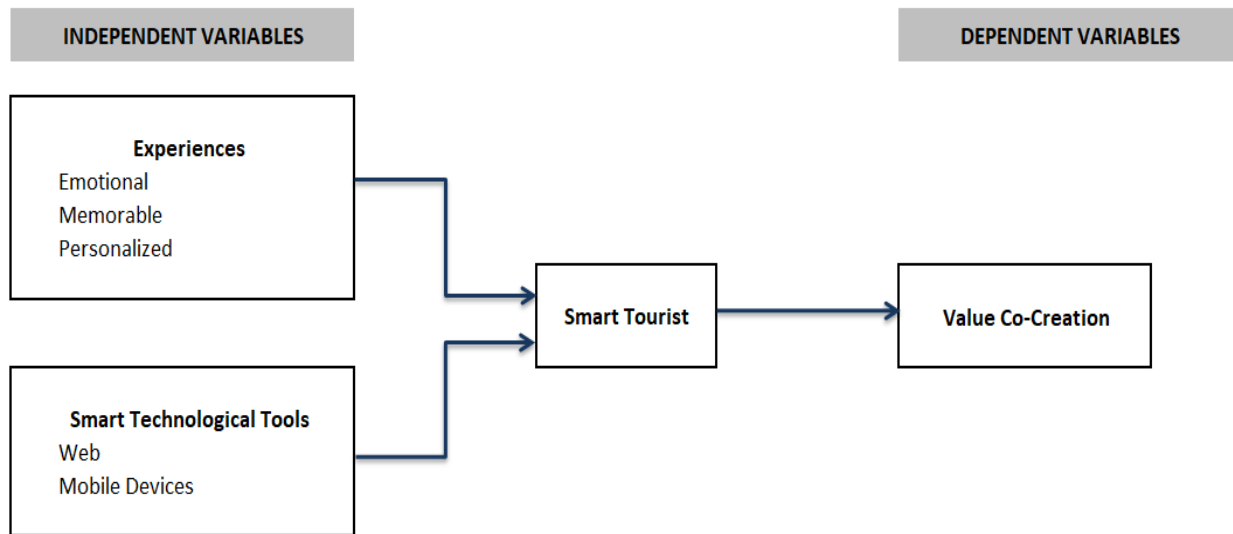
After reviewing the existing smart tourism literature, plenty of research that addresses the positive or negative effects of technological tools on experience value co-creation were found. However, I couldn't find any published research about Tampere, and even though studies are highlighting the positive impact of smart technology on value co-creation, the impact of the smart tools adopted by a destination on value co-creation is least explored. Hence, by doing this research I intend to contribute to filling that gap in the literature.

2.7 Conceptual Framework

A conceptual framework is comprised of one or maybe more theoretical concepts (in portion part or in full), in addition to various concepts and empirical evidence from the research (Jabareen, 2008). The created framework is used to demonstrate the connections between the concepts as well as how they connect to the research subject. Based on these aspects, in terms of smart

tourism, smart destinations, smart technologies, smart tourist and customer value co-creation, the following framework can be presented for the purpose of this study;

Figure 1: Conceptual Framework



Source: Author

The elaboration of the conceptual model is as follows;

In accordance with the rationale of co-creation, tourism companies would pursue visitor understanding and previous experience in attempt to co-create value for travelers. As a consequence, during in the planning process, tourism businesses and consumers collaborate upstream to co-design a notion as well as a journey or co-develop a tourism experience (Payne et al. 2008). Travelers are not interested in more premeditated travel, instead prefer to work closely with the providers to determine their experience, which begins with the formation of a discussion and the exchanging of information between the two characters (company and tourists) (Prahalad and Ramaswamy, 2004). During in the second stage of traveling, the visitor co-creates tourism-related operations, service, and recreation with regional companies in order to have unforgettable and unique experiences. The traveler will acquire data from the internet in order to personalize the service. He could also create a component of or the complete tourist offer. Travelers co-create their greatest genuine travel experiences on the internet. The third phase is broadening the

tourist experience and communicating it with potential tourists using new information and communication technologies, for example the internet, which has shown to be an extremely useful tool for destination promotion. Furthermore, travelers' online comments, both favorable and bad, might have a substantial influence on the prestige of destinations and travel businesses. Upon that, the collaboration with tourist providers would evolve into a partnership on 'Consumer to Consumer' (C2C) tourist encounters (Binkhorst, 2006; Huang and Hsu, 2010; Rihova et al., 2014) (cited in Berrada, 2017).

Tampere being identified as a smart city, provides STTs to tourists to engage with service providers in the destination. Yet, the mere existence of STTs will not make any difference if the tourists aren't capable of handling those tools or if they wish not to use the tools. Therefore, tourists must be 'smart' to get fruitful outcomes from those smart tools. However, it is hard to assume that most of the travelers in this era are more conventional than smart with the paradigm shift of technology and people embracing technology to ease their lives. Travelers expect to have an emotional, memorable, if possible personalized travel experience for their lives. Even though, the service providers are willing to provide more personalized experiences to the customers in order for co-creation to happen both parties should communicate on a common ground. Therefore according to the conceptual model presented for the study, I try to assess whether the STTs provided by Tampere help smart tourists to have an emotional, memorable, and personalized experience by collaborating with destination service providers and co-creating value.

3. Methodology

Research methodology relates to the strategies or particular procedures that enable users in learning, choosing, organizing, and interpreting data related to a subject. It allows viewers to examine the study's validity and accuracy in the scientific paper. A research methodology also gives credence to the work and generates scientifically valid conclusions. It also contains a straightforward strategy that supports academics in staying on track, rendering the procedure seamless, productive, and controllable.

This chapter provides the intended methodology for this study.

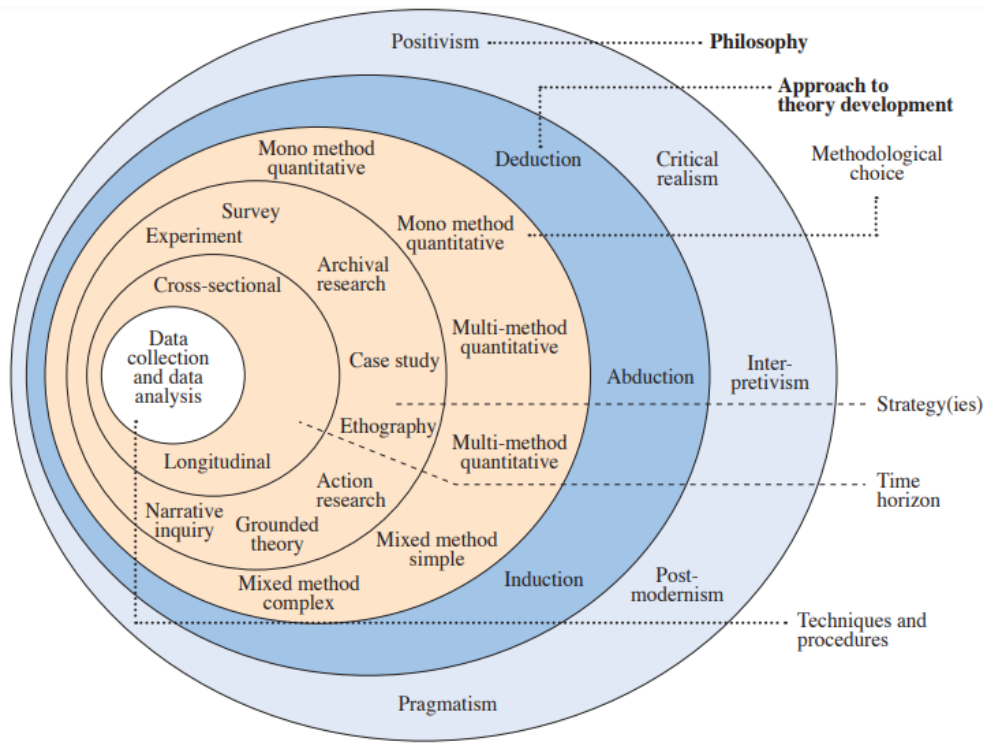
3.1 Research Onion

Methodology is a broad research strategy that specifies how study should be done. A thesis' research methodology is an integral ingredient that assists in ensuring coherence across the resources, processes, and core philosophy. One approach of establishing research methodology is based on the philosophical idea of the "research onion" suggested by Saunders et al (2007). The research onion presents a long overview of the various layers or processes that have to be performed in order to create a successful technique (Raithatha, 2017).

The research methodology starts with the identification of the basic philosophy, accompanied by the identification of approaches, methods, and strategies, in addition to the formation of time spans, each of which leads to the survey methodology - the primary methodologies and procedures for data collecting and interpretation. The research onion, introduced by Saunders et al. (2016), is a framework for organizing studies and creating methodological approaches by working through the sections of the research onion one at a time (Melnikovas, 2018).

In this study, I first identified the research philosophy belongs to interpretivism research paradigm since the outcome will largely depend on the interpretations I make during the analysis. After that, I understood that inductive approach would be suitable because I build the analysis using primary data collected by conducting semi structured interviews. The specifics of methodology of this study is discussed in coming topics.

Figure 2: Research onion



Source: Saunders et al. (2007).

3.1.1 Research philosophy

It refers to a collection of rules underlying the perspective or standpoint upon which the study is conducted. Ontology and epistemology are frequently employed to research it. Ontology pertains to the legitimacy of the material and how an individual perceives its reality in this environment, whereas epistemology pertains to the accurate data necessary for the investigation as well as how to acquire it. In scientific work, philosophical viewpoints are frequently separated into positivism and interpretivism, with positivist claiming that truth is autonomous of the subject being examined and interpretivism asserting that each viewer has their own vision and explanation of actuality. As a consequence, positivist research is frequently extremely scientific and creates empirical phenomena, while research indicated is typically qualitative in essence (Melnikovas, 2018).

Ontology is the "what" as well as "how" of just what people comprehend - in other phrases, what constitutes the essence of reality as well as what we are certainly capable of understanding and knowing. For instance, does truth emerge as a clear specific entity, or does it probably depend on who you seek? Epistemology, on the other extreme, is preoccupied with "how" we get information and come to actually comprehend - in other phrases, how we establish what truth is as well as boundaries of the understanding (Melnikovas, 2018).

The three major study philosophies are:

- Positivism
- Interpretivism
- Pragmatism

The effect of societal and cultural variables on individuals is underlined by interpretivism. This view of the world concentrates on people's opinions and thoughts in consideration of their socio-cultural background. The interpretivist approach necessitates the investigator to take an involved position in the investigation in order to gain a complete understanding of the participants and their behavior, ideas, and interpretations (Melnikovas, 2018).

My research topic relates to the interpretivism research paradigm because in this paradigm the ontology explains that reality is not objective but is constructed by the individuals through their interactions and the reality is interpreted by the individuals in the society. Therefore, the study will construct, and the results will depend on how tourists interpret the link and usage of STT on experience value co-creation (Melnikovas, 2018).

3.1.2 Research approach

The research onion indicates that it is utterly important to identify the proper approach for a study. It is necessary to accurately describe the research method because this will influence the selection of data collecting and interpretation in the research. The deductive technique begins with the formulation of a specific hypothesis based on the literature study, and thereafter seeks to test this hypothesis and see whether it maintains under certain settings. The inductive technique, in contrast hand, commences with experiences that the scholar utilizes to formulate a fresh

hypothesis. Inductive techniques in essence involve constructing theories via research rather than beginning a project with a hypothesis as a framework. In the research of a previously unidentified isolated group, an inductive technique might be employed. Because there is limited awareness about this society, the study would be necessary to gather understanding about it, contributing to the formulation of theories (Melnikovas, 2018).

As this study is carried out with unknown entities and societies (travelers from different locations to Tampere), I selected the inductive approach for this study.

3.1.3 Case study

A case study is a comprehensive, in-depth assessment of a particular topic, such as an individual, organization, or entity, or an occurrence, phenomena, or crisis. The matter is investigated in this method of study to obtain an in-depth comprehension of problems in a real world situation. The purpose here is to obtain an in-depth explanation within the context of this research, not to generalize the conclusions (inherently). When undertaking case study work, it is necessary to account for the social environment and the culture, which suggests that this type of investigation is (usually) qualitative in character and likely to be inductive. Furthermore, also because researcher's preconceptions and interpretation are significant in case studies, it is primarily governed by an interpretivist philosophy (Melnikovas, 2018).

This is a qualitative study and data was collected by conducting semi-structured interviews that went on about one hour each which allowed me to go in-depth about the topic and understand the topic more broadly with people's subjective statements about reality. However, at the beginning I used several survey type questions to get simple “yes” or “No” answers for simplify the data analysis. As a characteristic of the constructionism paradigm, I had to rely largely on participants' statements and as there is no objective truth, the results depend on my understanding, knowledge, status, etc. As I used the theory of co-creation in this study, it helped me to look into this study through a certain lens. Also, this research continued as a single case study of Tampere tourist destinations as my focus is limited to Tampere smart tourism.

3.1.4 Research choice

The research onion recommends that you undertake research using just a particular technique, a mixed method, or a multi-method framework. The mono-method just incorporates single method for the inquiry. The mixed approach is based on the combination of two or more different approaches, most frequently qualitative and quantitative techniques. Ultimately, the multi-method incorporates a broader variety of techniques (Melnikovas, 2018).

Qualitative research attempts to understand different functions, themes, or situations. Interpretivist investigations are qualitative examinations that seek to get a better understanding of the research phenomena. In this research, an inductive reasoning method is employed. The goal of inductive reasoning is to construct theories through means of observation and empirical analysis. These experiments are not designed to evaluate current hypotheses, but rather to set up new ones. These investigations do not employ hypothesis testing (Melnikovas, 2018).

This will be a qualitative study and data is collected by conducting semi-structured interviews followed by survey type questions.

3.1.5 Data collection and analysis

To collect data for this study, as a primary source I conducted ten in-depth, semi-structured interviews (telephone, and online interviews as per the interviewee's preference) with tourists, and one interview with an official from "Visit Tampere" starting from 16th of December 2022 until 30th of April 2023. Apart from that, I used related documents from authorities, the content of official websites, apps, and other tools as secondary sources of information for my research. The thinking mode of the research is inductive. A major issue of inductive reasoning is determining whether a sample provides a good foundation for bigger generalizations. One approach to address this problem is a diversity-based strategy, believing that different samples will provide a better basis for generalization than homogeneous samples (Rhodes et al., 2008). However, as inductive reasoning is in itself incomplete, I acknowledge that even with good observations, I can get to incorrect conclusions. But as Rhodes et al (2008), suggested minimizing this challenge in my research I reached a more diverse sample to collect data.

I diversified this sample by choosing tourists in different groups such as local and international tourists, and young and older tourists.

My research questions are more directed toward tourists. Therefore, I used the convenience sampling method to select a sample because, especially in the case of tourists it is best to ask about their availability and willingness to provide information. After all, they are in the middle of their travel and I could only get information from tourists who are willing to participate in my study at the time of data collection. I visited popular tourist places to meet with tourists to ask for their participation in this study and set convenient time and mode for interviews. Initially, I gave them a short survey to answer and asked for their willingness and preferred time for a detailed interview. Tampere is voted for first place for domestic tourism which continuously attract domestic tourists to the destination. Therefore, I was able to enough number of domestic and international tourists for the study.

The data collected through interviews were analyzed by using the thematic data analysis method. It is strategy for assessing qualitative information called thematic analysis is skimming throughout a collection of data and trying to find trends in the information's significance in order to identify themes. Creating meaning of the data is indeed an active reflexive process where the author's personal observation is crucial. In the interests of creating a theoretical justification for the concept being studied, thematic analysis also encompasses (typically inductive) scripting of qualitative data into collections of interconnected entities, or metaphysical categories, in addition to the discovery of recurrent connections and trends between topics.

In a thematic analysis, the main objective is to find the main themes which are derived from the discussions or the interviews carried out with the respondents. Hereafter, the main themes discovered through the interview responses will be presented using the sub topics with the interview extracts themselves where appropriate.

I understood that this method is more appropriate to analyze the gathered empirical data for this study as it provides a great deal of freedom when it comes to understanding data, and it makes it easier to approach massive data sets by categorizing them into broad themes. After transcribing the data gathered through interviews they were analyzed and patterns were identified of the

textual data and through that the key themes of the content. Then those themes were related to the research questions and conclusions were drawn from the study.

3.2 Ethics

There seem to be numerous reasons that make it essential to follow ethical standards in researching. First, standards enhance research objective such as information, integrity, and fault avoidance. Restrictions on manufacturing, distorting, or misusing research results, for illustration, encourage the truth while eliminating inaccuracy (Fujii, 2012).

Second, while accelerate progress includes a substantial number of collaboration and coordination among several different people from many professions and agencies, ethics codes emphasize qualities that are important to collaborative effort, such as tolerance, transparency, respect and understanding, and impartiality. Numerous ethical conventions in academia, for instance, criteria for publication, ownership and patent rights guidelines, information sharing regulations, and peer review privacy rules are aimed at safeguarding intellectual ownership rights while promoting cooperation. Several scholars want to be appreciated for their discoveries and do not desire their innovations to be pirated or exposed early (Doody et al., 2017).

Third, a large number of ethical guidelines assist in maintaining researchers answerable to the community. National regulations on scientific misconduct, shady dealings, human participant safeguards, and animal rescue and exploitation, for illustration, are required to guarantee that academics sponsored by public money might well be held responsible to the general public. Fourth, ethical principles in science contribute to the public's backing of research. Individuals are more likely to sponsor a scientific study if they possess trust and respect in the research's integrity and reliability (Fujii, 2012).

Additionally, many scholarly conventions endorse a broad range of other essential values of morality and society such as civic responsibility, civil rights, the welfare of animals, statutory obligations, and public safety and well-being. Ethical shortcomings in studies can have serious implications for human and animal participants, academics, and the broader population. For illustration, a researcher who debunks data in a medical trial could damage or perhaps even

destroy subjects, and a scholar who fails to adhere to radiological or biological safety rules and regulations might endanger his or her own well-being and safety, in addition to the wellbeing of employees and trainees (Doody et al., 2017).

Taking all this into consideration, this research is carried out by respecting all ethical guidelines. The confidentiality and privacy of all participants in this study was respected. This research is not built around any vulnerable groups (e.g. patients, minors). However, I took verbal consent at the beginning of each interview explaining to them what will be done with the data from all the parties who participated in giving data for the research. Especially from the tourists since I approached them during their travels. As for the data management plan, all the interviews are kept in audio forms stored on a separate hard drive throughout the process.

4. Background Findings

This section is comprised of findings of the interviews and the first background information acquired through the survey is presented in the following order.

1. Demographic findings
2. Experience related findings
3. Concluding remarks

4.1 Demographic Findings

In this the demographic findings of this study are listed as follows;

1. Age of the respondent
2. Local or international status of the respondent
3. Travel frequency
4. Number of visits to Tampere

4.1.1. Age of the respondent

The age of the tourists or the respondents was determined under the demographic information since it is important to know whether the respondents or the tourists were from a much younger category of the age or in the youth and middle-aged category or in the older generation. Since the study was on smart tourists which necessarily includes the use and competency in the technology, it was important to determine the age as in most cases the age factor is a key determinant of whether the people are competent with technology or not.

As per the study sample, the age category was broadly categorized into three parts as below 25 years of age, between 25 years to 50 years of age and the aged above 50 years. As per the responses collected, 3 respondents mentioned that belonged to the age category of below 25 years of age, 6 mentioned that they belonged to the age category of 25 years to 50 years of age and 1 mentioned that he belonged to the age category of above 55 years. This renders that the sample has been comprised of a majority of young aged respondents (a 90% of the sample has been young). When it comes to the percentage representation of the sample in terms of age, 30% of the respondents belonged to the age category of below 25 years of age, 60% of the respondents belonged to the age category of 25 years to 50 years of age and 10% of the respondents belonged to the age category of above 55 years.

4.1.2. Local or international status of the respondents

The local or international status of the tourists or the respondents was determined under the demographic information since it is important to know whether the respondents or the tourists were from a much local or internal destination or from a far-fetched international destination. Since the study was on the promotion of Tampere tourism which necessarily includes the use and competency in smart technology, it was important to determine the local or international status as in most cases the regional factor is a key determinant of whether the people are exploring certain destinations or not as well as whether people are likely or unlikely to become a smart tourist or not.

As per the study sample, the local or international status category was simply categorized into two parts as local tourists or international tourists. As per the responses collected, 7 respondents mentioned that belonged to the local status category and 3 respondents mentioned that belonged to the international status category. This renders that the sample has been comprised of a majority of local respondents (a 70% of the sample has been local respondents). When it comes to the percentage representation of the sample in terms of local or international status, 70% of the respondents belonged to the category of local status and 30% of the respondents belonged to the category international status.

4.1.3. Travel Frequency

The travel frequency of the tourists or the respondents was determined under the demographic information since it is important to know whether the respondents or the tourists were from a much frequent set of travelers where they would reserve time for travel even amidst the hectic work and other commitments rather than waiting for the perfect or the ideal time for travelling where or the variable do seem to be in the right place or in the ad hoc category of the travelers who would travel once in a while when all the factors do seem correct and permit. Since the study was on the smart tourists which necessarily include the use of the technology in a much more frequent manner, it was important to determine the travel frequency of the tourists or the respondents as in most cases the travel frequency of the tourists or the respondents factor is a key determinant of whether the people are likely to use smart technologies in a proper, objective, effective and competent manner or not.

As per the study sample, the travel frequency of the tourists or the respondents category was broadly categorized into two parts as a regular or frequent traveler category or non-regular or non-frequent traveler category where the respondents were given the option of simply responding with a 'Yes' or 'No. As per the responses collected, 7 respondents mentioned that belonged to the regular or frequent traveler category and 3 respondents mentioned that belonged to the non-regular or non-frequent traveler category. This renders that the sample has been comprised of a majority of regular or frequent traveler category (a 70% of the sample has been regular or frequent traveler category respondents). When it comes to the percentage

representation of the sample in terms of regular or frequent traveler category or non-regular or non-frequent traveler category status, 70% of the respondents belonged to the category of regular or frequent traveler category and 30% of the respondents belonged to the non-regular or non-frequent traveler category.

4.1.4. Number of visits to Tampere

The number of visits of the tourists or the respondents to the Tampere destination was determined under the demographic information since it is important to know whether the respondents or the tourists were inclined towards or mesmerized by the Tampere travels in a manner that they are repeating the travels to Tampere or the respondents or the tourists were simply visiting the Tampere with the view of merely seeing it for one time in life.

As per the study sample, the number of visits of the tourists or the respondents to Tampere category was broadly categorized into three parts as a first time traveler or tourist to Tampere, one to three time traveler or tourist to Tampere or more than three time traveler or tourist to Tampere. As per the responses collected, 5 respondents mentioned that belonged to first time traveler or tourist to Tampere category and 4 respondents mentioned that belonged to the one to three time traveler or tourist to Tampere category and 1 respondent mentioned that belonged to the more than three time traveler or tourist to Tampere category. This renders that the sample has been comprised of a balanced portion of each repeated and first time travelers or tourists to the Tampere (a 50% of the sample has been first time traveler or tourist to Tampere category respondents whilst another 50% of the sample has been more than one time traveler or tourist to Tampere category respondents).

4.2 Experience related findings

The findings of the study are presented in the following order;

1. Use of the web to find travel destinations
2. Use of mobile devices to find travel destinations
3. Digital savvy nature of the respondents
4. Use of smart devices to find about Tampere
5. Possibility to have found Tampere without digital sources
6. Emotional experience of the Tampere tour
7. The extent to which the use of smart devices contributed to the Tampere experience being emotional
8. Memorable experience of the Tampere tour
9. The extent to which the use of smart devices contributed to the Tampere experience being memorable
10. Personalized Experience of the Tampere Tour
11. The extent to which the use of smart devices contributed to the Tampere experience being personalized
12. The assessment of the contribution of smart technologies to making Tampere attractive

4.2.1. Use of the web to find travel destinations

As per the responses collected, all 10 respondents belonged to the category of tourists that used the web to find travel destinations. This renders that the sample has been comprised of a majority of web-using respondents (a 100% of the sample has been respondents who use the web to find out about travel destinations, including Tampere). When it comes to the percentage representation of the sample in terms of web using status, 100% of the respondents belonged to the category of respondents who use the web to find about the travel destinations.

4.2.2. Use of the mobile devices to find travel destinations

As per the responses collected, 9 respondents mentioned that belonged to the category of tourists that used mobile devices to find travel destinations whereas 1 mentioned that he belonged to the category of tourists that did not use the mobile devices to find travel destinations. This renders that the sample has been comprised of a majority of mobile device using respondents (a 90% of the sample has been respondents who use the mobile devices to find about the travel destinations, including Tampere). When it comes to the percentage representation of the sample in terms of mobile device using status, 90% of the respondents belonged to the category of respondents who use the mobile devices to find about the travel destinations whereas 10% of the respondents belonged to the category of respondents who did not use the mobile devices to find about the travel destination.

4.2.3. Digital savvy nature of the respondent

As per the responses collected, 7 respondents mentioned that belonged to the category of tourists that can be considered digital savvy when it comes to finding travel destinations whereas 3 mentioned that they cannot be considered digital savvy when it comes to finding travel destinations. This renders that the sample has been comprised of a majority of digital savvy respondents when it comes to finding travel destinations (a 70% of the sample has been respondents can be considered digital savvy when it comes to finding travel destinations, including Tampere). When it comes to the percentage representation of the sample in terms of digital savvy status in terms of finding travel destinations, 70% of the respondents belonged to the category of respondents who can be considered digital savvy when it comes to finding travel destinations whereas 30% of the respondents belonged to the category of respondents who cannot be considered digital savvy when it comes to finding travel destinations.

4.2.4 Use of smart devices to find about Tampere

The status of the tourists or the respondents to be digital savvy and have used smart devices and digital technologies when it comes to the finding about Tampere was determined under the experience related questions since it is important to know whether the respondents or the tourists have used smart devices and digital technologies when it comes to the finding about Tampere. Since the study was on the smart tourists which necessarily include the use of technology in a much more frequent manner and also on the promotion of tourism in Tampere which includes customers tending to find out about Tampere through digital means, it was important to determine the status of the tourists or the respondents to have used smart devices and digital technologies when it comes to the finding about Tampere as in most cases the use of the digital or smart sources by tourists or the respondents in terms of finding specifically about Tampere is a key determinant of whether the people are likely to use smart technologies in a proper, objective, effective and competent manner or not when it comes to finding out about Tampere.

The majority of the questions under this segment of the interview included straightforward yes or no responses from the respondents. This question was also given the straightforward answers of yes or no with the view of simplifying the answering process of the respondents.

As per the responses collected, 9 respondents mentioned that belonged to the category of tourists that used digital or smart sources when it comes to finding about Tampere specifically whereas 1 mentioned that he did not use digital or smart sources when it comes to finding about Tampere specifically. This renders that the sample has been comprised of a majority of digital savvy respondents when it comes to using digital or smart sources in finding about Tampere specifically (a 90% of the sample has been respondents can be considered to have used digital or smart sources when it comes to finding about Tampere specifically).

4.2.5. Possibility to have found Tampere without digital sources

The possibility of the tourists or the respondents to have not used smart devices and digital technologies when it comes to the finding about Tampere was determined under the experience related questions since it is important to know whether the respondents or the tourists have found out about Tampere even without digital sources.

As per the responses collected, 9 respondents mentioned that belonged to the category of tourists that could have found out about Tampere even without the use of digital or smart sources whereas 1 mentioned that he could not have found out about Tampere without the use of digital or smart sources. This renders that the sample has been comprised of a majority of respondents who could have found out about Tampere even without digital sources when it comes to using digital or smart sources in finding about Tampere specifically (a 90% of the sample has been respondents can be considered to have used found out about Tampere even without the use of digital or smart sources when it comes to finding about Tampere specifically). When it comes to the percentage representation of the sample in terms of finding about Tampere specifically even without the use of digital or smart sources, 90% of the respondents belonged to the category of respondents who could have found out about Tampere even without the use of digital or smart sources whereas 10% of the respondents belonged to the category of respondents who could not have found out about Tampere without the use of digital or smart sources. This question was specifically targeted at finding the Tampere on the digital sources through digital means.

4.2.6. Emotional experience of the Tampere tour

As per the responses collected, 8 respondents mentioned that they belonged to the category of tourists that felt the experience at Tampere was remarkably emotional whereas 2 mentioned that they belonged to the category of tourists that did not feel the experience at Tampere was remarkably emotional. This renders that the sample has been comprised of a majority of respondents who felt the experience at Tampere was remarkably emotional (a 80% of the sample has been respondents who can be considered to have belonged to the category of tourists that felt the experience at Tampere was remarkably emotional). When it comes to the percentage representation of the sample in terms of using digital or smart sources when it comes to finding about Tampere specifically, 80% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was remarkably emotional whereas 10% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was not that remarkably emotional.

4.2.7. Contribution of smart devices to the Tampere experience being emotional

As per the responses collected, 2 respondents mentioned that they belonged to the category of tourists that did not bear the opinion that the experience at Tampere could have been remarkably improved in terms of emotional aspects had the smart or digital devices and sources been involved in the process (they believed that the experience had not been improved at all with the involvement of the smart or digital means) whereas 6 mentioned that they belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to some extent’ in terms of emotional aspects had the smart or digital devices and sources been involved in the process. A further 2 mentioned that they belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to a greater extent’ in terms of emotional aspects had the smart or digital devices and sources been involved in the process.

This renders that the sample has been comprised of a majority of respondents who felt the experience at Tampere could have been improved in terms of emotional aspects had the smart or digital devices and sources been involved in the process (a 80% of the sample has been respondents who believed that the experience could have been improved in terms of emotional aspects had the smart or digital devices and sources been involved in the process). When it comes to the percentage representation of the sample in terms of believing or not believing whether the experience at Tampere could have been improved in emotional terms had the smart or digital means and sources been involved in the process, 20% of the respondents belonged to the category of tourists that did not bear the opinion that the experience at Tampere could have been remarkably improved in terms of emotional aspects had the smart or digital devices and sources been involved in the process (they believed that the experience had not been improved at all with the involvement of the smart or digital means), 60% of the respondents belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to some extent’ in terms of emotional aspects had the smart or digital devices and sources been involved in the process and 20% of the respondents belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to greater extent’ in terms of emotional aspects had the smart or digital devices and sources been involved in the process.

4.2.8. Memorable experience of the Tampere tour

As per the responses collected, 8 respondents mentioned that they belonged to the category of tourists that felt the experience at Tampere was remarkably memorable whereas 2 mentioned that they belonged to the category of tourists that did not feel the experience at Tampere was remarkably memorable.

4.2.9. Contribution of smart devices to the Tampere experience being memorable

As per the responses collected, 2 respondents mentioned that they belonged to the category of tourists that did not bear the opinion that the experience at Tampere could have been remarkably improved in terms of memorable aspects had the smart or digital devices and sources been involved in the process (they believed that the experience had not been improved at all with the involvement of the smart or digital means) whereas 6 mentioned that they belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to some extent’ in terms of memorable aspects had the smart or digital devices and sources been involved in the process. A further 2 mentioned that they belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to greater extent’ in terms of memorable aspects had the smart or digital devices and sources been involved in the process.

4.2.10. Personalized experience of the Tampere tour

As per the responses collected, 8 respondents mentioned that they belonged to the category of tourists that felt the experience at Tampere was remarkably personalized whereas 2 mentioned that they belonged to the category of tourists that did not feel the experience at Tampere was remarkably personalized. This renders that the sample has been comprised of a majority of respondents who felt the experience at Tampere was remarkably personalized (a 80% of the sample has been respondents who can be considered to have belonged to the category of tourists that felt the experience at Tampere was remarkably personalized). When it comes to the percentage representation of the sample in terms of using digital or smart sources when it comes

to finding about Tampere specifically, 80% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was remarkably personalized whereas 10% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was not that remarkably personalized.

4.2.11. Contribution of smart devices to the Tampere experience being personalized

As per the responses collected, 2 respondents mentioned that they belonged to the category of tourists that did not bear the opinion that the experience at Tampere could have been remarkably improved in terms of personalized aspects had the smart or digital devices and sources been involved in the process (they believed that the experience had not been improved at all with the involvement of the smart or digital means) whereas 6 mentioned that they belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to some extent’ in terms of personalized aspects had the smart or digital devices and sources been involved in the process. A further 2 mentioned that they belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved ‘to greater extent’ in terms of personalized aspects had the smart or digital devices and sources been involved in the process.

This renders that the sample has been comprised of a majority of respondents who felt the experience at Tampere could have been improved in terms of personalized aspects had the smart or digital devices and sources been involved in the process (a 80% of the sample has been respondents who believed that the experience could have been improved in terms of personalized aspects had the smart or digital devices and sources been involved in the process). When it comes to the percentage representation of the sample in terms of believing or not believing whether the experience at Tampere could have been improved in personalized terms had the smart or digital means and sources been involved in the process, 20% of the respondents belonged to the category of tourists that did not bear the opinion that the experience at Tampere could have been remarkably improved in terms of personalized aspects had the smart or digital devices and sources been involved in the process (they believed that the experience had not been

improved at all with the involvement of the smart or digital means), 60% of the respondents belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved 'to some extent' in terms of personalized aspects had the smart or digital devices and sources been involved in the process and 20% of the respondents belonged to the category of tourists that did bear the opinion that the experience at Tampere could have been improved 'to greater extent' in terms of personalized aspects had the smart or digital devices and sources been involved in the process.

4.2.12. Contribution of smart technologies to making Tampere attractive

As the last question of the second segment, the respondents were asked about how they assess the contribution of smart technologies to making Tampere attractive. There they were given four alternate options as 'Minimal. No need to be improved', 'Minimal. Need to be improved', 'Significant. Should be further improved' and 'Very significant'.

As per the responses collected, none of the respondents had believed that smart technologies do not contribute to the Tampere experience and hence there is no need for such technologies to be improved for the purpose of promoting Tampere. However 3 respondents had believed that smart technologies contribute in a minimal extent to the Tampere experience and hence need to be further improved. In the meantime, 6 respondents had believed that smart technologies contribute in a significant extent to the Tampere experience and hence necessarily and importantly need to be further improved whereas 1 respondent had believed that smart technologies contribute in a very significant extent to the Tampere experience.

4.3 Concluding remarks about the demographic findings

This section of the interview included 04 questions and the findings are presented as follows;

1. Ability of the smart technologies impact the value creation at Tampere
2. Possibility to recommend Tampere to another potential tourist
3. Use of smart technologies in promoting Tampere to another tourist
4. The possibility of the tourism in Tampere be improved if it uses smart technologies for promotions

4.3.1 Ability of the smart technologies impact the value creation at Tampere

This question was given three answer options ranging from ‘not at all’, ‘to some extent’, and ‘to a greater extent’. Such straightforward answers were provided with the view of simplifying the answering process of the respondents.

As per the responses collected, 0 respondents mentioned that they do not believe the fact that smart technologies do not contribute to the value creation at all (they believed that the experience had not been the same and value adding had the smart technologies not been involved) whereas 5 respondents (50% of the sample) mentioned that they belonged to the category of tourists that did bear the opinion that the experience and value creation at Tampere could had been impacted ‘to some extent’ with the involvement of the smart technologies in the process. A further 5 respondents (50% of the sample) mentioned that they belonged to the category of tourists that did bear the opinion that the experience and value creation at Tampere could had been impacted ‘to greater extent’ with the involvement of the smart technologies in the process.

4.3.2 Possibility to recommend Tampere to another potential tourist

This question was also given the straightforward answers of yes or no with the view of simplifying the answering process of the respondents.

Accordingly, as per the responses collected, all the respondents in the sample mentioned that they would necessarily recommend Tampere to prospective or potential tourists and travelers in the future. This shows a 100% response rate in terms of ‘Yes’.

4.3.3 Use of smart technologies in promoting Tampere to another tourist

This question was given three answer options ranging from ‘Yes, I will use smart methods only’, ‘No, I will not use smart methods, and ‘Yes, but I will use both smart and non-smart methods’. Such straightforward answers were provided with the view of simplifying the answering process of the respondents.

As per the responses collected, 5 respondents (50% of the sample) mentioned that they would use smart technologies/methods to promote Tampere to prospective and potential tourists (this answer was obtained with the indication that respondents would use only smart technologies to promote Tampere without using any non-smart methods). Only 1 respondent (10% of the sample) mentioned that they would use non-smart methods to promote Tampere to prospective and potential tourists (this answer was obtained with the indication that respondents would use only non-smart technologies to promote Tampere without using any smart methods) and 4 respondents (40% of the sample) mentioned that they would use both smart technologies and non-smart methods to promote Tampere to prospective and potential tourists

4.3.4 The possibility of improving Tampere tourism by using smart technologies

This question was also given straightforward answers of yes or no with the view of simplifying the answering process of the respondents.

Accordingly, as per the responses collected, all the respondents in the sample (10 respondents of the sample) mentioned that tourism in Tampere be improved if it uses smart technologies for promotions. This shows a 100% response rate in terms of ‘Yes’, which is a very important response.

5. Qualitative Findings

This chapter will include extracts from the interviews held with the tourists to provide a better insight into the findings. The analysis will be carried out in the form of a thematic analysis for ease of understanding.

As presented in the earlier section, the interview questions were basically categorized into three categories; demographic questions, experience-related questions, and concluding remark-related questions.

Experience-related questions represent the section that directly relates to the study in terms of collecting the data from the respondents to provide insights about their experience which is substantial for the study. In regard to this study, the respondents were posed with 12 questions that were related to the experience they had in Tampere, the main study location and subject of the study. In this category of questions, the researcher included the questions that related to the key variables of the study which included website usage, smart mobile device usage, and the extent of the Tampere stay in terms of its memorable, emotional, and personalized status.

From the interviews, five main themes were identified and the presentation order of themes is as follows;

01. The importance of digital means to travelers
02. The importance of a travel destination being emotional to the tourist
03. The importance of a travel destination being memorable to the tourist
04. The importance of a travel destination being personalized to the tourist
05. Possibility of digital means to the promotion of Tampere

5.1 First theme – Importance of digital means to travelers

One theme discovered through the conduct of the interviews is the importance of the digital means to the travelers. This was discussed with them in terms of how often they use the web and mobile devices to use travel destinations as well as how well they consider themselves to be tech savvy travelers. The status of the tourists or the respondents to be digital savvy when it come to the finding of travel destinations was determined under the experience related questions since it is important to know whether the respondents or the tourists were from a tech savvy category or from a lesser tech savvy category, just like the use of web and mobile devices in the earlier questions.

As per the summary of the responses in this regard, the percentage representation of the sample in terms of digital savvy status in terms of finding travel destinations, 70% of the respondents belonged to the category of respondents who can be considered digital savvy when it comes to finding travel destinations whereas 30% of the respondents belonged to the category of respondents who cannot be considered digital savvy when it comes to finding travel destinations. This means that majority of the respondents believed them to be digital or tech savvy when finding tourist destinations; what is more important is that they view it is important to be tech and digital savvy in current days when it comes to finding destinations. This is further supported by certain statements made by respondents;

One respondent mentioned that

“I consider myself a digital traveler, so, I desire full automation and... and total control over every element of my holiday, I think I have become this way because of the demographic trends. I usually look forward to using my smartphone in particular to access things like flights, transactions, and travel-related updates, it is so easy. And I always want a smooth, flawless experience from the minute I leave my home until reaching my destination, one that spans terminals, airplanes, immigration enforcement, and other modes of transportation..., in everything.”.

As this interviewee correctly mentioned, the demographic influences have prompted many travelers, including the respondent himself to look for digital means mostly through accessing the web using their mobile devices when it comes to travel-related planning and execution.

Pointing at how the digital savvy nature is required in current days and how travel organizations as well do promote the same, one respondent mentioned that,

“tourists seem to be more prepared than it has ever been, and tech-savvy tourists will definitely turn online for ideas: Most tourists, including myself, would prefer to utilize VR technology or the virtual world to explore a location, despite the fact that it's doubtful that it would ever completely replace real-world travel. A few tourism operators are dabbling in this market, and Xbox even established a digital tourism engine that assists users in creating trip projections based on their favored video games”

According to this statement, travelers are even concerned about how travel organizations provide digital options to make their travel experience easier, better, and smoother.

This was further supported by another respondent when he mentioned that,

“People who engage in travel and continue to be drawn to self-reflexive selfies and cell phone photography settings, and considering that virtually everybody carries a camera with them at all times, we could easily live like tourists every day. Contemporary tourism is identified with photography. I mean, photograph postcards have been used as keepsakes since ancient times right? and the caricature of the passenger with a mobile camera has now appeared to be a generic thing or a must have basic minimum when travelling.”.

This brings out a whole new yet very current and valid perspective where digital comes into play in terms of travel and tourism; the photography. To use social media and post the pictures of the travel, a person has to be somewhat digital savvy. And on the other hand, to find what the most picturesque places are, the best way is to search online which again requires the person to be digital savvy.

All in all, this indicates that it is of high importance that travelers are tech/ digital savvy in the contemporary age.

5.2 Second theme - The importance of a travel destination being emotional to the tourists

The importance of the travel destination being emotional was highlighted by the fact that 80% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was remarkably emotional whereas 10% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was not that remarkably emotional.

When asked about what makes them feel emotional at a destination, a interviewee answered that

“... my expectations while traveling to a specific location is influenced by many factors like the location's heritage, buildings, cuisine, infrastructures, geography, entertainment, and shopping and all. These characteristics draw me to the area and enhance my whole travel experience. I think these are all essential components of the destinations and have a big impact on how successful they are”

Further, a rather excited respondent mentioned that,

“Traveling gives you an opportunity to discover new cultures and situations that you could otherwise have been unaware of, which may also be a really emotional life-changing event. There is also no doubt that you will encounter a wide range of emotions beforehand, throughout, and then after your travels. For me, the emotion of the travel accounts for a whole lot and gives a new level of fulfillment”

People choose to travel as a getaway from their routines or busy life schedules. Or else, someone might travel to explore new things and places. Therefore, Travellers desired emotions like excitement, relaxation need to be fulfilled in their travels. The above statements are clear testimony to how the tour experience being emotional matters to the travelers.

5.2.1 Contribution of digital means to the travel destination being emotional

The connection between the digital means and the travel experience being emotional can be well explained using the below statement made by a respondent

“Several tour companies have done a wonderful job of using photography as a theme; for example, mm.. I’m not sure whether you have seen this or not but, Airbnb launched a video advertisement that included still photos in a picture book, remembering memories, during the time when blogging about our holidays on social media was discouraged upon due to the pandemic. Even though we may take more photos than we could ever publish, part of the motivation for taking photos is a desire to remember. So, images that depict photographs being taken in conjunction with sincere, emotional moments of discovering, connection, love, or pleasure can be moving as long as we can understand why that particular moment was worthwhile photographing. You know I went to that park Näsineula with my children and felt thousand emotions with them being happy and playing. I think I have over 500 pictures of that place alone”.

This indicates how the digital means, as the travelers view it, contribute to making the travel experience much more emotional and lasting. 80% of the sample has been respondents who believed that the experience could have been improved in terms of emotional aspects had the smart or digital devices and sources been involved in the process and this is much agreeable given the above statement where tourists strongly consider that experiences are made memorable with digital means. This is further proven by the study of Suonpää, J. (2008) which mentioned that a destination becomes a stage because of the visitors who go there from all over the world, not just for any old performance or event but for photographs. Photography plays an important part in holiday emotions.

5.3 Third theme - The importance of a travel destination being memorable to the tourist

The status of the tourists or the respondents on the experience of Tampere being memorable was determined under the experience related questions since it is important to know whether the respondents or the tourists have felt something memorable about Tampere during the stay. Since the study was on the smart tourists and promotion of the Tampere to the tourists which necessarily include the memorable experience of the Tampere being highly important with the use of technology, it was important to determine the status of the tourists or the respondents to have felt the Tampere experience remarkably memorable as in most cases the memorable experiences do substantially and directly contribute to the repeated visits of the customer as well as the promotion of the destination by the customer to potential and prospective customers.

As per the findings of the interviews, 80% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was remarkably memorable whereas 10% of the respondents belonged to the category of respondents who felt that they belonged to the category of tourists that felt the experience at Tampere was not that remarkably memorable. This means that a majority felt the experience to be memorable.

In this regard of whether the tour experience being memorable matters, a respondent stated that

“Making memorable experiences when traveling, specially, can have a hugely positive influence on how well our brains work, you know. The better our brains perform as a whole at keeping positive emotions and memories, the more we enjoy ourselves and our environment”.

This shows that, the respondent himself being a tourist, believes that travel experience has to be memorable for the tourist. He further added that

“Something appears to be memorable if it is a fact that should be treasured or is likely to remain in memory because it is unique or exceptionally wonderful. So, making sure every one of your guests has an amazing stay and feels appreciated can go a long way towards ensuring that they see your resort as a favourite vacation place. Am I wrong?”

This clearly outlines the importance of the tour experience being memorable.

As per the words of another interviewee himself,

“You know right? I don’t think I need to mention this specifically to you. There are three basic motives exist for travel like leisure travel, family visits, and business travel. One of those categories includes the vast majority of tourist activities. Many leisure travel activities focus mostly on refreshment, amusement, and relaxation. I myself am engaged in tourism business. I run a small lodge in my home town and I have been doing the same for 20 plus years now. You know, one thing that I have learnt over these years of experience is that somewhere down the line, the destination starts to take precedence over the trip. We become so preoccupied with following our procedures and finishing each stage that we neglect to enjoy the rest breaks along the route. We place more emphasis on the documentation than developing a close relationship with our customers. That is very bad. It directly affects the travel experience being memorable to them. I don’t like that happening to me because I want my every tour to be memorable. Otherwise, what is the whole point of spending your money and time and travelling?”

The point respondent brought up addresses two perspectives; from one perspective, it states that the customers value the tour experience being really memorable and from other perspective it states that the effort put forth by travel destination operators is often not up to the mark of making the experience being memorable to the traveler.

Above mentioned two perspective is also evident by the studies I refered in the theory section. On one hand, based on the perceptions of the travels of tourists, individual travelers create unforgettable travel experiences (Kim and so, 2012; Tung and Au, 2011). On the other hand, a tourist experience is defined as their sensory, psychological, and emotional state during a service encounter; yet, this definition in some ways falls short of accurately capturing an unforgettable travel experience (Kim et al., 2012; Shing et al., 2018).

5.3.1 Contribution of digital means to the travel destination being memorable

The status of the tourists or the respondents on the possibility of the experience of Tampere being more memorable had the smart devices been involved in the process of finding the Tampere to its promotional strategies to stay experience was determined under the experience related questions since it is important to know whether the respondents or the tourists have felt something memorable about Tampere during the stay owing to the involvement (or non-involvement) of the smart devices and digital sources.

Here there have been many statements that how the technology or digital means could contribute to the travel experience being memorable. One key factor or a theme that was found here in this regard is that many tourists find that the contribution from the digital means to the travel experience being memorable is very high and is a mandatory.

As per one respondent, the digital tourism concept clearly highlights the importance and contribution by the digital means to the memorable travel experiences.

“In my opinion, tourism industry and digitalization is correlative and these two have come a long way together making everything simplified in travel business. While talking about the travel business and digitalization, they must be careful to avoid making everything oversimplified, which is extremely normal. This whole thing do not just end with the digitization of bookings or.. with online travel and flight searches. On the other hand, the entire experience is changing, from start to finish.

A tourist destination that uses digital means has an integrated network of management systems, platforms, and various types of data (on energy consumption, mobility, and so forth) that facilitate more effective and efficient accessibility to the goods and services offered, add value through personalization, and increase visitor interaction with the destination and their integration within it before, during, and after their visit (Vargas-Sánchez., 2016). This hints at how the technology has taken the entire industry to be revolutionary and at the same time how the tourists perceive the same and embrace it.

Further a second interviewee stated that,

“It is hardly surprising that popular booking websites like Booking.com, Expedia, Trivago, and many more have found success. This has given users and business owners who wish to efficiently reach potential tourists a very practical and necessary tool. Because of how crucial the internet is to the booking process, even industry titans in digital tourism have made some changes to their operations. Consider Airbnb, the most well-known hosting platform in the world, which now allows visitors to book experiences and trips directly through its website in addition to accommodations”.

This respondent in fact takes some real world examples as well to support his notion that digital means are there to make the travel experience more memorable. His statement that *“because of how crucial the internet is to the booking process, even industry titans in digital tourism have made some changes to their operations”* is a very true fact in this regard.

Moreover, another respondent also confirmed this statement by stating that

“Don’t you think that the social media is at the same time contributing to the travel experience being memorable? In my opinion, social media is also a part under digital means. When you use social media in your travel experience and when you post and share your travel experience on social media, it tends to be more memorable experience right? So considering the effects of social media on my travel experiences, I would clearly say that digital means can contribute to the experience being memorable”.

In fact this statement is made from a different perspective but touching a very valid point here. Social media in essence contribute the experiences being very memorable.

All these statements lead to one conclusion and that is the fact that travelers want their travel experience to be memorable in every way possible and they perceive that the digital means can and do contribute to the experience being memorable.

5.4 Fourth theme - The importance of a travel destination being personalized to the tourists

The status of the tourists or the respondents on the experience of Tampere being personalized was determined under the experience related questions since it is important to know whether the respondents or the tourists have felt something personalized about Tampere during the stay.

Notably for this question, many respondents touched on the social media impact on the travel experience being personalized.

As one respondent mentioned,

“The internet and social media are major influences for most travelers when choosing a new place. So, People like me get ideas for their travels from the reviews given online by other users, and I think they are more.. more trustworthy and.. and unbiased than travel agents. I think in some ways, word-of-mouth among friends has been replaced by the internet. The opinion of a person who has already visited a location holds equal weight to advice received from a guide or travel agency digitally”.

As he mentioned, people tend to get ideas online to find out whether the travel experience can be tailored to their requirement or not based on the previous tourists’ experiences and sharing of the experiences on internet either on travel booking sites or social media. In other words, people are essentially looking for their experience to be tailored as much as possible.

Interviewee from ‘VisitTampere’ mentioned that,

“Someone has to deliberately display themselves on the internet in order to draw in the most customers. Due to this new behavior being sparked by digital transformation, organizations that wish to stay competitive have started working on their digital presence, which is now essential from a strategic standpoint”.

Although this touches more of a corporate standpoint, it is still proof that people are looking for travel experience to be memorable.

5.4.1 Contribution of digital means to the travel destination being personalized

The status of the tourists or the respondents on the possibility of the experience of Tampere being more personalized had the smart devices been involved in the process of finding the Tampere to its promotional strategies to stay experience was determined under the experience related questions since it is important to know whether the respondents or the tourists have felt something personalized about Tampere during the stay owing to the involvement (or non-involvement) of the smart devices and digital sources. Since the study was on the smart tourists and promotion of the Tampere to the tourists which necessarily includes the personalized experience of the Tampere being highly important with the use of technology, it was important to determine the status of the tourists or the respondents to have felt the Tampere experience remarkably personalized. Had the smart or digital sources been involved as in most cases the personalized experiences do substantially and directly contribute to the repeated visits of the customer as well as the promotion of the destination by the customer to potential and prospective customers.

Below are some of the extracts taken from the interviews from different respondents and those are testimony that tourists or the travelers view that digital means can contribute to the travel experience being more personalized.

As one respondent mentioned,

“The internet and social media are major influences for most travelers when choosing a new place. So, People like me get ideas for their travels from the reviews given online by other users, and I think they are more.. more trustworthy and.. and unbiased than travel agents. I think in some ways, word-of-mouth among friends has been replaced by the internet. The opinion of a person who has already visited a location holds equal weight to advice received from a guide or travel agency digitally. I myself read many reviews about Tampere before coming here, you know. I saw that many have posted about how fun Tampere is for the families with kids in summer time and here we are to have fun”.

Another respondent mentioned that,

“When deciding where to go on their next vacation, social networks often play a huge impact. Social networks have such a powerful potential to sway others that the transition from curiosity to knowledge happens very quickly. Just think about it. We tend to like..plan vacations based on social media posts that our friends, family members, or work colleges, or other connections had made”.

Another interviewee mentioned that,

“Thankfully, this digital transformation gives hoteliers and other businesses in the travel sector tremendously powerful tools to create really unforgettable stays at their facilities. Consider the Starwood hotel chain, which intends to digitize a significant portion of its offerings. For example, the check-in or check-out process may be handled entirely from a customer's smart phone using an app”.

If you look closely, there's absolutely nothing unexpected about this data; otherwise, we wouldn't be able to explain the steady emergence of some key sectors, like travel blogging, which involves producing travel-related content that is used by many companies and contractors in the industry to showcase their products and services.

5.5 Fifth theme - Possibility of digital means to the promotion of Tampere

In the light of above-discussed areas, certain inputs were obtained from the customers regarding how the digital means can be used to improve the Tampere experience.

One respondent mentioned that,

“Just consider personalized emails that can be sent after specific search or.. or retargeting strategies, they are used to reach users based on their specific navigation path nowadays isn't it?. The more precise and detailed information you gather about your customers, among other things, the easier it will be to then contact them with offers and messages tailored to their preferences and lifestyles.... Along with other aspects, digitalized tourism industry is a result of

the smartphone being the preferred tool of travellers and their continued use of it.. Using it is the main reason behind this.”.

While this statement holds very true when it comes to the less digital focus on value co-creation of Tampere, another interviewee mentioned that,

"Today, no one argues that whether travel and technology go together well. This combined force is very important(...) Due to its wide popularity, people like me often use the Internet to plan our trips.”

Moreover, a statement from another respondent can be presented that

“you know you cannot separate the new generation and advanced technology.. Well.. social media, apps, blogs, and other platforms play a big part when it comes to organising a holiday and it has grown as a result of this combined desire (...) This is why the use of digital tools is necessary for tourism locations to satisfy traveller needs... So, I know that Tampere has this informative website and social media accounts but what I really want to say is those are not enough to organize the whole thing you know.. my entire trip as I want it. This is only my opinion, but I think the website should be more interactive, suggestive you know.. to give me the best experience.. they should sell it to me. I think this city should think more about this .”

Further, one respondent specifically mentioned how Tampere lacks the digital presence and how it affects their travel experience.

“I personally adore Tampere a lot. This is my third visit to Tampere and this time I came along with my kids as well. Tampere is perfect. But since now you asked it, I think I better say it out loud. I really don't think that Tampere adequately leverages the digital means to improve or market its attractions. Look, I'm not saying that the Tampere cannot be found on the internet. It can be. In fact if you search Google by typing Tampere in the search bar, even the Wikipedia shows you the result and the city has a website and all. That is not the problem. What I say is that the promotions the Tampere carries out is not adequate at all. Especially in a digital world where almost every traveler tends to find you on social media, how would you expect them to know about you when your social media presence is low? Just maintaining a instagram account or or a website is not enough anymore.. I think it is high time that Tampere moves to digital

means or whatever it is called to meet this future travelers to Tampere and have a conversation with them to really find out what they need and cater them to their needs so that it can attract many travelers”.

All these testimonials lead the discussion towards one direction; Eventhough Tampere has its own website (visittampere.fi), and mobile app (Tampere.Fi), and social media accounts the city has not been leveraging those digital means adequately for example provide different tour packages, or giving the chance for the tourists to directly contact service providers of tourist attractions to make their own personal tours etc., but it has high potential of attracting travelers if they do so. Given what was said above, it is undeniable that the entirety of the journey has also been impacted by digital transformation and is now shared on social media after it is accomplished. What were formerly well-known slide presentations or portfolios of recollections nowadays are postings, selfies, and tales that are shared with a broader audience on the networks. As the more postings about a destination are shared, the further valuable this material will have become for many other individuals who are going to want to visit there and publish videos and photographs in turn, tourism is thus achieved with a circular component, which concludes and resumes in a way that really is virtually self-feeding.

6. Discussion

According to Prahalad and Ramaswamy (2004), co-creation is a take to ensure a type of institutional or corporate approach that focuses specifically on customer experience as well as interactive relationships by attempting to bring different parties around each other, such as a corporation and a collection of customers, to cooperatively generate an interdependent role and importance and start creating a benefit-rich experience. In those other respects, it is a strategic approach built on existing customer interactions and collaborative connections. It enables and promotes more established consumer interaction in order to offer a more valuable experience. The following major components of the experience are customization and user engagement (Boswijk et al., 2007). The development of the rationale of value co-creation involves consideration of experience and consumer choice, which seem to be or could be a source of

benefit and competitiveness for the corporation (Prahalad and Ramaswamy, 2000; Vargo and Lusch, 2004; Von Hippel, 2005). In essence, including clients in the co-creation process is a specific approach for organizations vying to satisfy clear objectives and achieve a competitive advantage (Prahalad and Ramaswamy, 2000, 2003). Organizations want to generate market-specific goods and services, while also attempting to build dynamic and engaging connections with their customers using value co-creation. Organizations also strive to achieve targets in regard to innovation, consumer experience in the value creation process, and client partnership with the organization. It will verify that its product is personalized and adapted to the expectations and requirements of its clients (cited in Berrada, 2017). When considering Tampere's standpoint in regard to involvement in co-creation six respondents mentioned that service providers were willing to cater to their needs by adjusting their products and services according to their requests and some even suggested what more they can provide to make their experience better. One respondent mentioned that;

“I have several places in Tampere, that I would definitely recommend to other visitors because they did such a fantastic job providing the best service they could to meet my requests. I came here with my disabled child and I certainly had many demands from the hotel we stayed and other places we visited to make our stay comfortable.”

The satisfied voice of this respondent clarifies that most of the service providers in Tampere are making efforts towards co-creation that most certainly leave a positive memory about them in tourists' minds. Hence, I would say the service-providing companies are contributing a great deal in making Tampere competitive among other destinations. Because, tourism organizations need to see travelers as collaborators in the creation of the item and the tourist experience, not as passive observers, according to the principle of co-creation of tourism worth (Jager, 2009). Customers, as per Prahalad and Ramaswamy (2003), play a significant role in the formulation of co-created value as well as the context of the experience. As just a function, co-created value is connected to the individual's experiences as a result of his engagement with the organization (Holbrook, 1999). The tourist experience is formed when visitor consumption and manufacturing collide (Andersson, 2007). As a corollary, visitor experiences are sociological creations resulting from an ongoing process of education and creative engagement among the numerous tourism stakeholders. They are relationship-based in nature without overlooking the relevance of

emotions in tourism, as characterized by Lashley (2008), since tourist experiences are emotionally stimulating, which adds to memorability. In essence, experiences are remembered (Pine and Gilmore, 1999), and the consumer's interaction with his provider must be an amazing, unforgettable, and memorable occasion (Bouchet, 2004). Similarly, experiences are both distinctive and personalized since they operate on the several dimensions, including emotionally, physiologically, cognitively, and sometimes even morally (Carù and Cova, 2002). These are also extremely personal, individually perceived, ethereal, ephemeral, and continual (Zlători, 2013). The visitor experience tends to take on a more direct approach as a response (Larsen, 2007). As a consequence, the tourist experience might well be thought of as either an overarching storyline, unique and distinctive, or planned and molded into the community. Ultimately, Walls et al. (2011) characterize the tourist experience as "a multidimensional concept composed up of a wide range of external and internal elements that influence and affect customer interactions, which could also arise only if the engaging consumer is capable and willing to partake" (cited in Berrada, 2017).

One interviewee mentioned that;

"You know we had our second wedding anniversary last week and I wanted to do something special for her.. mm.. to surprise her. So I went to this nice and fancy dining restaurant. It has the most beautiful view in Tampere. And I talked with the manager there to arrange a romantic dinner for her. I had a plan in my mind.. and they were very supportive you know. They had more fresh ideas for this than what I had planned in my mind. Together we could arrange the best celebrations for her.. it was unforgettable. I mean, getting such authentic service is all I could ask for from a restaurant. I would recommend this place to anyone without a doubt.. and I gave them nice feedback too"

This statement proves that this respondent got to co-create his anniversary evening with a restaurant in Tampere and that experience ended up being a memorable one for him which leads him to recommend this place to other tourists who are looking for similar experiences. According to the study findings all the respondents mentioned that they would recommend

Tampere for a potential tourist and most certainly they might have acquired great experiences from Tampere for them to consider recommending the visit of Tampere city to others.

According to the above statements, I would state, the co-creation of the visitor experience has reached its full capacity since it can be communicated and appreciated by travelers in their neighborhood. On the one extreme, as a function of their engagement and dedication to the process companies nowadays are able to provide engaging and remarkable experiences to tourists. It provides a significant market edge in identifying the firm in a competitive market, in addition to the uniqueness that motivates visitors to choose a certain tourism company. Co-creation, on the contrary, allows guests to do small details beyond simply undergoing the encounter intended by tourism producers, including such getting involved in self-development exercises, investigating multiple sensory surroundings, and communicating with others simply because they are straightforwardly involved in the development and composing their operations from moments to moments (cited in Berrada, 2017).

Consumers are becoming more engaged, knowledgeable, and exchange about the company's products and services, in addition to all encounters they interact with the organization, as a function of the growth of the Internet, interchange platforms (including such social networking sites), and 2.0 innovations (Prahalad and Ramaswamy, 2004). As a direct consequence, businesses are unable to launch products or services into the marketplace without trying to leverage customer experiences, which also portrays the amount of interplay the consumer encounters with the organization all throughout the duration of the product or service, and trying to incorporate these thoughts and feelings upstream all through the construction process. As an outcome, value co-creation with clients is a continuous, intellectual, and cultural engagement between businesses and clients who are totally devoted to and participate in the creation of new items and services (cited in Berrada, 2017).

Currently, the World Wide Web allows companies to have strong linkages with their clients. Buhalis and Licata (2002) evidenced this strong bond between the two players by conducting an interview in which a few interviewees asserted that "genuinely, the Internet is providing a superior service and experience for the customer as their communication with tourism enterprises

could be more relevant." Besides that, the respondents mentioned that "rather than trying to meet an unpracticed travel consultant in a town center shop after attempting to find parking and lining up for one's turn, a number of tourism organizations already can provide specialized support through their phone centers and enable clients to ask detailed questions to a product/property/destination consultant". According to Binkhorst (2006), the three most crucial internet sites for the coming years are the Internet, IDTV, and mobile communications devices. He further believes that these advanced technologies would enable intelligent conversations with every visitor and therefore will create an immersive atmosphere in which tourism breakthroughs may be founded on co-creation experiences (cited in Berrada, 2017).

As a consequence, information technologies, along with the Internet, will support us in recognizing the three primary stages that compose the whole visitor experience, which are: planning, tourism, and remembrance (Watson et al., 2004). As a consequence of the engagement and intimate collaboration between visitors and tourism suppliers, travelers will obtain uniqueness and will never encounter the identical tourist experience repeatedly (Cova et al., 2011). It is because they intend to utilize previous events to happier tomorrow ones, just use the Internet to look for knowledge, and also have direct interaction with the numerous on-site service companies in order to personalize and thoroughly live their traveling. Tourists will feel more empowered and accountable for producing the experience they choose, as well as co-creators of the value that will be acquired from tourism entrepreneurs' offerings (Prahalad and Ramaswamy, 2004).

Tampere City owns a highly informative website that acts as a platform where tourism suppliers and tourists get to connect. Service providers market their products and services through this platform and any tourist who is particularly interested can visit the places. Further, if they wish to have the products or services tailor-made, they can contact the companies via the given contact information (VisitTampere, 2023). Moreover, Tampere has its very own mobile app which is informative in terms of finding out offers in the center of Tampere, about public transportation, special events held in Tampere, and tips related to restaurants, accommodations, and attractions. These technological tools that Tampere offers help tourists plan their visit and collaborate with service providers. However, according to the findings, while respondents of this study believed that the tools Tampere offered helped them to have a great experience, they also

mentioned that if there was more involvement of technological tools it would have been impacted more on value co-creation. Thus, I strongly believe that technological tools that Tampere offer, are best fit for pre-travel and post-travel co-creation, co-creation because the tools themselves don't support co-creation. The tourists' needs, willingness, and intentions decide whether co-creation happens or not.

During the planning stage, the traveler might get fresh details about the area or a tourism destination's activity via the Internet, which enhances and broadens sources of information. In the case of Tampere, the 'Visit Tampere' website, social media pages, and mobile app massively distribute up-to-date information for travelers to plan their trip. Certainly, owing to this technology means travelers are linked to the rest of the world, therefore they are constantly presented with a plethora of data to arrange their holiday activities (Watson et al., 2004). Travelers want actual facts about destinations, tourist hotspots, and public and government and recreation during the travel process. For instance, consumers may search for and obtain travel advice on their portable devices, permitting them to adjust their work schedule or co-design fresh ones while considering tourism producers' recommendations and suggestions in respect. Travelers communicate their thoughts on the place, communicate and explain their experiences and tales toward others (prospective visitors, other travelers, and also close relatives, neighbors, coworkers, and so forth), and could even endorse or reject the destination (cited in Berrada, 2017).

In this study, the main question was posed to assess whether smart technological tools facilitate tourist experience value co-creation. Based on the respondent statements and survey data presented in previous chapters, this study reveals that the existing technological tools of Tampere facilitate acquiring emotional, memorable, and personalized tourist experiences. However, technological advances allow unlimited access to the information sources of various travel destinations all over the world to attract more tourists to their destinations. Those allow travelers to compare destinations with one another. Hence, according to the findings, I would argue that there is a lack of involvement of technological tools and innovative tools to make Tampere outstanding within the competition of destinations.

According to the findings, 50% of the respondents strongly believed and engaged in co-creation with service providers while the other 50% were not actively engaged in co-creation due to their

personal feelings like lack of intention and unwillingness to collaborate even though, they used the STTs provided by Tampere to gather information and plan their holiday. This addresses the second research question posed in the study which is to what extent tourists are engaged in experience value co-creation using STTs. The findings show that not every tourist is interested in personalizing the travel experience but most of them do. However, my suggestion is creating smart tools that encourage co-creation and promoting them via information sources like websites and mobile apps would attract more tourists to Tampere. Nevertheless, the statements from respondents and survey data prove that digital means help tourists to have a memorable and emotional experience on the Tampere tour which answers the third research question of the study.

7. Conclusion and Recommendations

The capacity of the business to effectively maintain a specific market segment over the foreseeable future is referred to as a location's competitiveness. To conserve the resources while preserving their standing in the marketplace relative to rivals, it is possible to grow and include value-added goods. The distinctiveness of the location is crucial to the business image's intended positioning since it enables the brand stand out and be recognizable to tourists.

The study's findings indicate that cuisine, cultural events, and tourist products and itineraries are the key components chosen to draw tourists in order to compete in this particular market. The truth that these tactics are used often across the board shows how important they are for these cutthroat metropolitan locations. The analyses show that the primary methods for differentiating tourism locations are historic, lodging, and recreational attractions. In accordance with the findings, remarkable travel experiences have a big impact on attachment theory, and hedonic and eudaimonic well-being act as the appropriate mediators in this connection. These interactions are not affected by how frequently people visit. When a traveler has a memorable, fulfilling experience that contributes to their fulfillment and meaning in life, they become emotionally attached towards the destination.

In context with the aforementioned, it is apparent that digital revolution has fundamentally altered the travel sector in 2 directions. On the one hand, it has had a major impact on peoples' perceptions and actions. Despite the pervasive use of digital devices during vacations, people nevertheless act in a particular way. On the opposing hand, it has allowed operators a broad selection of instruments so they can please the "2.0 tourist," who is undoubtedly more demanding but in some ways easier to approach and attract given the abundance of websites and technological solutions accessible. Everyone who wants to find enjoyment in life through the utilization of this sector must be in tune with these demands and trends while also demonstrating a willingness to adapt company practices and tactics in order to guarantee long-term success. The same applies to Tampere as well.

In summary and conclusion, the following can be mentioned in form of recommendations in the context of Tampere;

1. Digitalization is affecting how businesses operate. In order to be effective and competitive, tour operators and many other travel organizations rely on a variety of digital procedures, and generally seek out vendors that have significant concentrations of digitalization. Travelers' increased need for digital communications, internet shopping, and contactless alternatives during the COVID-19 epidemic has heightened the need for digital company operations. One should integrate digital processes into the organization whenever possible to give it a competitive edge when attempting to attract the new tourists and travelers as well as to retain them for the longer term. A tourist organization or destination needs to gradually transition to complete digitalization. Internal operations and providing value to customers are the main priorities of traditional tour operators. Full digitalization creates "smart" tourism with a high degree of creativity, quick and real-time e-commerce, and possible connections with consumers and vendor partners as they go toward increasing digitalization through internet advertising and online sales. While there are numerous prospects, there are also obstacles however.
2. Internet shopping has become increasingly popular among customers in this era of technology. This comprises travel-related goods including airline tickets, lodging, travel packages, multi-day vacation destinations, quick getaways, auto hires, and other such items. Convenience is the main advantage that internet shoppers experience. The globe is

a crowded space, thus clients in all categories place a high value on quick transactions that immediately meet a need. In the B2C industry, it's crucial to be able to acquire your travel goods online (business to consumer). The two primary internet channels for selling travel-related goods to customers directly involve your own webpage and/or online travel agencies (OTAs). Your webpage should be straightforward, educational, and transparent in the marketplace so that potential customers will be convinced of the superiority of your services and desire to come to you.

3. You should explore the e-commerce options available on the market before integrating an e-commerce infrastructure into your website. You should focus on features like an easy-to-use bundle presentation and instant online booking. To prevent issues like double booking, it is crucial that an e-commerce platform communicates easily with your webpage. It is crucial that your website functions perfectly on mobile platforms, such as smart phones and tablet computers, if you happen to own one.
4. In the interest of business development, CRM (Customer Relationship Management) systems support you in managing the data you collect regarding current and future clients through contacts with clients, including such marketing, sales, and client service engagements. For you to effectively target and improve their travel goods, CRM is critical. To compete and succeed, you need to have a CRM framework in place.

To conclude, I would acknowledge a few limitations I encountered during the study. The study was carried out within a limited time frame due to the lack of resources. Had there been more time span allocated to the study, a more insightful result could have been obtained.

The sample of respondents of the study is limited to visitors or tourists to certain attractions in Tampere. However, if the research could be carried out with respondents from all over the Tampere area, much more insightful findings could be obtained. Based on this study, for future researchers, I would recommend doing more detailed interviews with more than 20 local and international tourists for ease of generalization or doing a comparative study of the same topic of two or more smart cities in Finland.

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9. Appendix

Appendix 1 – Interview Questions

Questionnaire

Demographic related Questions

- 1 Age
 - Below 25
 - Years 26 - 50
 - Above 50
- 2 Local or International tourist
 - Local
 - International
- 3 Are you a regular traveller
 - Yes
 - No
- 4 How many times have you visited Tampere
 - Once
 - One to Three times
 - More than Three times

Experience related Questions

- 5 Do you use web to find better travel destinations digitally?
 - Yes
 - No
- 6 Do you use the mobile devices to find better travel destinations digitally?
 - Yes
 - No
- 7 Do you consider yourself a smart (digital savvy) tourist?
 - Yes
 - No
- 8 Did you use smart devices/digital sources to find about Tampere?
 - Yes
 - No
- 9 Had you found out about Tampere without smart devices/digital sources as well?
 - Yes
 - No
- 10 Have you felt the Tampere tourist experience emotional?
 - Yes
 - No
- 11 To what extent, has the use of smart devices contributed to the Tampere experience being emotional?
 - Not at all
 - To some extent
 - To a greater extent
- 12 Have you felt the Tampere tourist experience memorable?
 - Yes
 - No
- 13 To what extent, has the use of smart devices contributed to the Tampere experience being memorable?
 - Not at all
 - To some extent
 - To a greater extent
- 14 Have you felt the Tampere tourist experience personalized?
 - Yes
 - No
- 15 To what extent, has the use of smart devices contributed to the Tampere experience being personalized?
 - Not at all
 - To some extent
 - To a greater extent
- 16 Overall, what is your assessment about the contribution of smart technologies to making Tampere attractive?
 - Minimal. No need to be improved
 - Minimal. Need to be improved

Concluding Remarks

- 17 In your opinion, can the smart technologies impact the value creation at Tampere?
 - Not at all
 - To some extent
 - To a grater extent
- 18 Would you recommend Tampere to another potential tourist?
 - Yes
 - No
- 19 Would you use smart technologies in promoting Tampere to another tourist?
 - Yes, I will use smart methods only
 - No, I will not use smart methods
 - Yes, but I will use both smart and non smart methods
- 20 In your opinion, could the tourism in Tampere be improved if it uses smart technologies for promotions?
 - Yes
 - No